



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

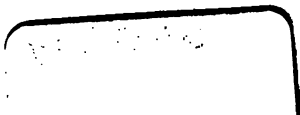
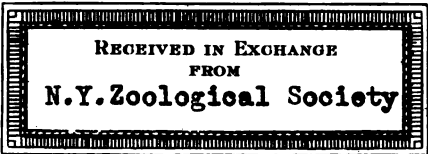
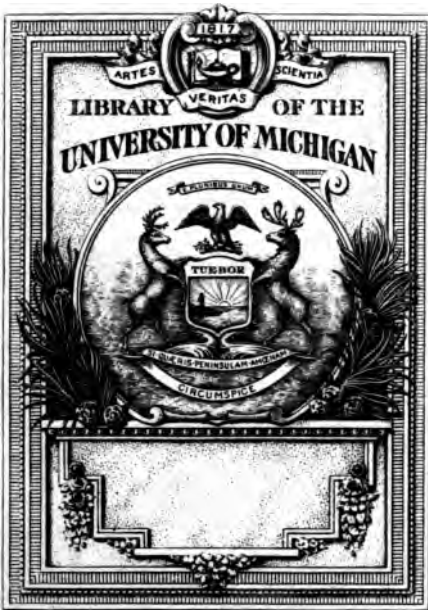
We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

B 1,073,268



Q

1

.M



COPYRIGHT, 1900, BY THE NEW YORK ZOOLOGICAL SOCIETY.

INTERIOR OF THE REPTILE HOUSE.

FOURTH ANNUAL REPORT
OF THE
NEW YORK
ZOOLOGICAL SOCIETY

CHARTERED IN 1895

OBJECTS OF THE SOCIETY
A PUBLIC ZOOLOGICAL PARK
THE PRESERVATION OF OUR NATIVE ANIMALS
THE PROMOTION OF ZOOLOGY



NEW YORK
OFFICE OF THE SOCIETY, 11 WALL STREET
MAY 1, 1900

Copyright, 1900, by the
NEW YORK ZOOLOGICAL SOCIETY

TROW DIRECTORY
PRINTING AND BOOKBINDING COMPANY
NEW YORK

1-27-06

CONTENTS

	Page
THE BOARD OF MANAGERS.....	5
OFFICERS OF THE SOCIETY.....	6
LIST OF MEMBERS.....	8
REPORT OF THE EXECUTIVE COMMITTEE.....	27
REPORT OF THE DIRECTOR	42
TREASURER'S STATEMENT :	
Park Improvement Fund.....	72
General Fund.....	74
Maintenance Fund.....	75
OPENING OF THE ZOOLOGICAL PARK.....	76
LIST OF GIFTS TO THE SOCIETY.....	81
ACT OF INCORPORATION	87
BY-LAWS.....	90
GRANT OF SOUTH BRONX PARK	97
ACT PROVIDING FOR GROUND IMPROVEMENTS	101

ILLUSTRATIONS

	Page
INTERIOR OF THE REPTILE HOUSE.....	<i>Frontispiece.</i>
SCULPTURED CORNICE OF REPTILE HOUSE.	26
A PORTION OF THE ELK HERD.....	36
SIDE CAGES OF THE AQUATIC BIRDS' HOUSE.....	42
LIBERATING THE FIRST LARGE MAMMAL.....	50
WINTER ON THE BUFFALO RANGE.....	50
THE BEAR DENS ON APRIL 17.....	60
ERECTING IRON WORK IN THE BEAR DENS.....	60
THE ROAD MAKERS.....	64
BUILDING CONCRETE COPING AT WATERFALL.....	64
OPENING DAY (NOVEMBER 8) AT REPTILE HOUSE	76
OPENING DAY AT THE BEAR DENS.....	76
ERECTING THE FLYING CAGE.....	86
NORTH END OF THE FLYING CAGE.....	86

BOARD OF MANAGERS.

Ex-Officio: { Hon. ROBERT A. VAN WYCK, Mayor of New York.
 { Hon. GEO. C. CLAUSEN, Pres't Dep't of Parks.

CLASS OF 1901.

F. AUGUSTUS SCHERMERHORN,	GEORGE B. GRINNELL,
A. NEWBOLD MORRIS,	CHARLES A. PEABODY, JR.,
CHARLES E. WHITEHEAD,	PERCY R. PYNE,
JACOB H. SCHIFF,	EDWARD J. BERWIND,
J. HAMPDEN ROBB,	WILLIAM C. WHITNEY,
GEORGE C. CLARK,	JOHN D. CRIMMINS.

CLASS OF 1902.

HENRY F. OSBORN,	H. CASIMIR DE RHAM,
HENRY W. POOR,	OSWALD OTTENDORFER,
CHARLES T. BARNEY,	L. V. F. RANDOLPH,
LISPENARD STEWART,	JOSEPH STICKNEY,
FRANK M. CHAPMAN,	WILLIAM C. CHURCH,
GEORGE CROCKER,	HUGH D. AUCHINCLOSS.

CLASS OF 1903.

LEVI P. MORTON,	MADISON GRANT,
ANDREW CARNEGIE,	SAMUEL THORNE,
MORRIS K. JESUP,	HENRY A. C. TAYLOR,
JOHN L. CADWALADER,	WILLIAM WHITE NILES,
PHILIP SCHUYLER,	HUGH J. CHISHOLM,
JOHN S. BARNES,	WM. D. SLOANE.

OFFICERS
OF THE
New York Zoological Society.

President:
HON. LEVI P. MORTON,
681 Fifth Avenue.

First Vice-President:
HENRY F. OSBORN,
850 Madison Avenue.

Second Vice-President:
CHARLES E. WHITEHEAD,
71 Broadway.

Executive Committee.

LEVI P. MORTON, <i>ex-officio</i> ,	PHILIP SCHUYLER,
HENRY F. OSBORN, <i>Chairman</i> ,	MADISON GRANT,
JOHN L. CADWALADER,	WILLIAM WHITE NILES.
JOHN S. BARNES,	CHARLES T. BARNEY.

Secretary:
MADISON GRANT,
11 Wall Street.

Treasurer:
L. V. F. RANDOLPH,
61 William Street.

Director of the Zoological Park:
WILLIAM T. HORNADAY,
183d Street and Southern Boulevard.

Architects:
HEINS & LA FARGE,
5 Beekman Street.

Auditing Committee.

HUGH D. AUCHINCLOSS, *Chairman.*
ROBERT L. NILES, WILLIAM C. OSBORN.

Scientific Council.

WILLIAM T. HORNADAY, *Chairman,*
Director of the New York Zoological Park.

MADISON GRANT, *Secretary ex-officio,*
Secretary of the New York Zoological Society.

PROFESSOR J. A. ALLEN,
Curator of Mammalogy and Ornithology, American Museum of Natural
History.

FRANK M. CHAPMAN,
Assistant Curator of Mammalogy and Ornithology, American Museum of
Natural History.

PROFESSOR HENRY F. OSBORN,
Da Costa Professor of Zoology, Columbia University.

PROFESSOR WILLIAM STRATFORD,
College of the City of New York.

PROFESSOR CHARLES L. BRISTOL,
University of New York.

DR. GEORGE BIRD GRINNELL,
Editor of *Forest and Stream*.

MEMBERS

OF THE

New York Zoological Society.

Honorary Members.

- PROF. J. A. ALLEN, American Museum of Natural History, New York.
 PROF. ALEXANDER AGASSIZ, Museum of Comparative Zoology, Cambridge, Mass.
 THE DUKE OF BEDFORD, Woburn Abbey, England.
 MR. ARTHUR ERWIN BROWN, Director Philadelphia Zoological Gardens.
 PROF. DANIEL GIRAUD ELLIOT, Field Columbian Museum, Chicago, Ill.
 SIR WILLIAM FLOWER, British Museum of Natural History, South Kensington, London, England.
 DR. F. L'HOEST, Director of the Gardens of the Société Royale de Zoologie, Antwerp, Belgium.
 DR. C. HART MERRIAM, Director of the U. S. Biological Survey, Department of Agriculture, Washington, D. C.
 DR. PHILIP LUTLEY SCLATER, Secretary of the Zoological Society of London.
-

Founders.

CARNEGIE, ANDREW.....	5 West 51st Street
DODGE, WILLIAM E.....	262 Madison Avenue
*GOELET, ROBERT.....	
GOULD, MISS HELEN MILLER.....	Irvington-on-Hudson
GOULD, GEORGE J.....	195 Broadway
HUNTINGTON, C. P.....	2 East 57th Street
MORGAN, J. PIERPONT.....	3 Broad Street
MORTON, LEVI P.....	681 Fifth Avenue
OTTENDORFER, OSWALD.....	150 West 59th Street
PYNE, PERCY R.....	36 East 36th Street
SCHIFF, JACOB H.....	932 Fifth Avenue
SLOANE, WILLIAM D.....	642 Fifth Avenue
TAYLOR, HENRY A. C.....	52 Wall Street
THORNE, SAMUEL.....	43 Cedar Street

* Deceased.

TREVOR, MRS. JOHN B.....	21 East 37th Street
*VANDERBILT, CORNELIUS.....	
VANDERBILT, WILLIAM K.....	*.660 Fifth Avenue
WHITNEY, WILLIAM C.....	.871 Fifth Avenue
WOOD, MRS. ANTOINETTE ENO.....	Waldorf-Astoria

Associate Founders.

BARNES, JOHN S.....	.22 East 48th Street
BARNEY, CHARLES T.....	.101 East 38th Street
BERWIND, EDWARD J.....	.2 East 64th Street
CADWALADER, JOHN L.....	.40 Wall Street
JESUP, MORRIS K.....	American Museum of Natural History
SCHERMERHORN, F. AUGUSTUS.....	.41 Liberty Street
SCHUYLER, PHILIP.....	Irvington-on-Hudson
TIFFANY & Co.....	.15 Union Square

Patrons.

BABCOCK, SAMUEL D.....	.32 Nassau Street
BAKER, GEORGE F.....	.258 Madison Avenue
BLISS, CORNELIUS N.....	.117 Duane Street
BLISS, GEORGE T.....	.37 West 25th Street
CARTER, JAMES C.....	.54 Wall Street
CHISHOLM, HUGH J.....	.813 Fifth Avenue
CLARK, GEORGE C.....	.51 Wall Street
COOK, HENRY H.....	.1 East 78th Street
CROCKER, GEORGE.....	.35 Wall Street
*FLOWER, ROSWELL P.....	
FORD, JAMES B.....	.507 Fifth Avenue
FORD, J. HOWARD.....	.1425 Broadway
HARKNESS, CHARLES W.....	.611 Fifth Avenue
HAVEMEYER, HENRY O.....	.1 East 66th Street
HEWITT, ABRAHAM S.....	.9 Lexington Avenue
ISELIN, ADRIAN.....	.23 East 26th Street
JENNINGS, MISS A. B.....	.48 Park Avenue
KENNEDY, JOHN S.....	.6 West 57th Street
LEWIS, MRS. GEORGE.....	.411 Fifth Avenue
MORRIS, A. NEWBOLD.....	.19 East 64th Street
MORRIS, MRS. A. NEWBOLD.....	.19 East 64th Street
MORRIS, MISS EVA VAN CORTLANDT.....	.19 East 64th Street
MORRIS, NEWBOLD.....	.52 East 72d Street
OSBORN, PROF. HENRY F.....	.850 Madison Avenue
OSBORN, WILLIAM C.....	.71 Broadway
OSBORN, MRS. WILLIAM H.....	.32 Park Avenue

* Deceased.

POOR, HENRY W.....	18 Wall Street
PYNE, MRS. PERCY R.....	36 East 36th Street
SCHERMERHORN, WILLIAM C.....	41 Liberty Street
STEWART, LISPENARD.....	31 Nassau Street
STICKNEY, JOSEPH.....	1 Broadway
STICKNEY, MRS. JOSEPH.....	874 Fifth Avenue
STOKES, MISS CAROLINE PHELPS.....	37 Madison Avenue
THORNE, EDWIN.....	Babylon, L. I.
THORNE, JOEL W.....	8 East 55th Street
THORNE, MISS PHEBE ANNA.....	558 Madison Avenue
THORNE, SAMUEL, JR.....	8 East 55th Street
THORNE, S. BRINCKERHOFF.....	606 Madison Avenue
THORNE, VICTOR C.....	606 Madison Avenue
TWOMBLY, H. MCK.....	684 Fifth Avenue
*WEBB, WILLIAM H.	
WOLFF, A.....	27 Pine Street

Life Members.

ARNOLD, JOHN H. V.....	48 East 69th Street
AUCHINCLOSS, HUGH D.....	17 West 49th Street
AUCHINCLOSS, MRS. HUGH D.....	17 West 49th Street
AVERY, SAMUEL P.....	4 East 38th Street
BALLANTINE, ROBERT F.....	37 W. Washington Avenue, Newark, N. J.
BETTS, SAMUEL ROSSITER.....	102 Madison Avenue
BLACKFORD, EUGENE G.....	725 St. Mark's Avenue, Brooklyn
BOLDT, GEORGE C.....	The Waldorf-Astoria
BOND, FRANK S.....	38 West 51st Street
BREWSTER, ROBERT S.....	44 Wall Street
*BRONSON, FREDERIC.	
CAMMANN, GEORGE P.....	9 East 53rd Street
CAMP, HUGH N., JR.....	55 Liberty Street
CANFIELD, A. CASS.....	40 Park Avenue
CHANLER, WINTHROP.....	18 Exchange Place
CHISHOLM, HUGH J., JR.....	813 Fifth Avenue
CLARK, MRS. ALFRED CORNING.....	7 West 22nd Street
CLARKSON, BANYER.....	15 West 45th Street
COCHRAN, W. F.....	Yonkers, N. Y.
CRIMMINS, JOHN D.....	621 Broadway
DAVIS, E. W.....	Racquet Club
DELAFIELD, ALBERT.....	45 Cedar Street
DE RHAM, CHARLES.....	24 Fifth Avenue
DODGE, GEORGE E.....	27 West 57th Street
DODGE, MARCELLUS H.....	232 Madison Avenue
DRAPER, MRS. HENRY.....	271 Madison Avenue
DU BOIS, MISS ETHEL.....	268 Madison Avenue

* Deceased.

DU BOIS, MISS KATHERINE.....	10 West 43rd Street
DU BOIS, WILLIAM A.....	10 West 43rd Street
DUN, R. G.....	261 Madison Avenue
EHRET, GEORGE.....	1197 Park Avenue
ENO, AMOS F.....	111 Broadway
FAIRCHILD, CHARLES S.....	10 West 8th Street
FLINT, CHARLES R.....	68 Broad Street
GERRY, ELBRIDGE T.....	2 East 61st Street
GOODWIN, JAMES J.....	11 West 54th Street
GRANT, MADISON.....	11 Wall Street
GREEN, ANDREW H.....	214 Broadway
GUNTHER, BERNARD G.....	184 Fifth Avenue
GUNTHER, FRANKLIN L.....	530 Fifth Avenue
HAVEN, GEORGE G.....	32 Liberty Street
HAYES, R. SOMERS.....	30 East 51st Street
HIGGINSON, JAMES J.....	16 East 41st Street
HUBBARD, THOMAS H.....	16 West 58th Street
HYDE, JAMES H.....	120 Broadway
JENNINGS, OLIVER G.....	52 Broadway
KISSEL, GUSTAV E.....	15 West 16th Street
KNOWER, BENJAMIN.....	27 Thomas Street
LA FARGE, C. GRANT.....	7 Beekman Street
LANGDON, WOODBURY G.....	719 Fifth Avenue
LOW, C. ADOLPHE.....	41 Liberty Street
LOW, SETH.....	30 East 64th Street
LYDIG, DAVID.....	49 East 29th Street
MAITLAND, ALEXANDER.....	14 East 55th Street
MARC, THEOPHILUS M.....	359 Produce Exchange
MARKOE, JAMES B.....	59 Wall Street
NILES, WILLIAM WHITE.....	11 Wall Street
PARRISH, JAMES C.....	Metropolitan Club
PEABODY, CHARLES A., JR.....	2 Wall Street
PHOENIX, LLOYD.....	21 East 33rd Street
PHOENIX, PHILLIPS.....	3 East 66th Street
PINCHOT, J. W.....	2 Gramercy Park
QUINTARD, GEORGE W.....	66 Broadway
RAYMOND, CHARLES H.....	14 East 77th Street
ROBB, J. HAMPDEN.....	23 Park Avenue
ROGERS, ARCHIBALD.....	Hyde-Park-on-Hudson, N. Y.
SAMPSON, HENRY.....	14 West 58th Street
SCHIEFFELIN, EUGENE.....	865 Madison Avenue
SHERMAN, W. WATTS.....	838 Fifth Avenue
SLATTERY, JAMES.....	320 West 84th Street
SLOAN, BENSON B.....	7 East 38th Street
SLOAN, SAMUEL.....	7 East 38th Street
SLOAN, SAMUEL, JR.....	145 East 37th Street
SLOANE, JOHN.....	883 Fifth Avenue
STERNE, SIMON.....	Plaza Hotel

THOMPSON, ERNEST SETON.....	144 Fifth Avenue
THOMPSON, LEWIS S.....	Knickerbocker Club
THOMPSON, WILLIAM P.....	Red Bank, N. J.
TILFORD, FRANK.....	1412 Broadway
TRAVERS, MISS SUSAN.....	175 Madison Avenue
WADSWORTH, W. AUSTIN.....	Geneseo, N. Y.
WARREN, SAMUEL D.....	220 Devonshire Street, Boston, Mass.
WATSON, FRANCIS A.....	Union Club
WHITEHEAD, CHARLES E.....	71 Broadway
WHITEHEAD, PAUL.....	47 Broadway
WING, JOHN D.....	16 West 49th Street

Annual Members.

ABBOTT, WALTER.....	19 West 31st Street
ABEEL, GEORGE.....	5 East 124th Street
ABERCROMBIE, DAVID T.....	36 South Street
ADAMS, C. H.....	East Hampton, L. I.
ADAMS, FRANK J.....	148 Eighth Avenue
ADAMS, THATCHER M.....	15 West 17th Street
ADRIANCE, REV. HARRIS ELY.....	56 West 48th Street
AGNEW, ANDREW G.....	23 West 39th Street
AGNEW, MRS. CORNELIUS R.....	Palisades, N. Y.
AITKEN, JOHN W.....	873 Broadway
ALDRICH, MRS. H. D.....	200 Madison Avenue
ALDRICH, MRS. JAMES HERMAN.....	150 West 59th Street
ALEXANDER, FRANK D.....	123 West 44th Street
ALEXANDER, JAMES W.....	4 East 64th Street
ALEXANDER, DR. WELCOME T.....	940 St. Nicholas Avenue
ANDERSON, A. A.....	93 Fifth Avenue
ANDERSON, E. ELLERY.....	11 West 38th Street
ANDERSON, P. CHAUNCEY.....	11 West 38th Street
ANDREINI, J. M.....	29 West 75th Street
ANDREWS, J. SHERLOCK.....	Rochester, N. Y.
ANGUS, JAMES.....	1228 Clover Street, West Farms
ANTHON, A.....	13 West 35th Street
APPLETON, FRANCIS R.....	21 Maiden Lane
APPLETON, JAMES W.....	Knickerbocker Club
ARCHBOLD, JOHN D.....	20 East 37th Street
*AUCHINCLOSS, MRS. EDGAR S.	
AVERY, SAMUEL P., JR.....	368 Fifth Avenue
BALDWIN, DR. JARED G.....	8 East 41st Street
BARR, WILLIAM.....	Llewellyn Park, Orange, N. J.
BARRON, DR. JOHN C.....	70 Park Avenue
BATCHELLER, HENRY.....	44 Fifth Avenue

* Deceased.

BAXTER, GEORGE S., JR.....	18 Wall Street
BAYLIES, MRS. NATHANIEL E.....	1 East 71st Street
BEACH, F. C.....	9 West 20th Street
BEARD, DANIEL C.....	Flushing, L. I.
BEERBOWER, GEORGE M.....	Bedford Park
BEERS, M. H.....	408 Broadway
BENSON, FRANK SHERMAN.....	214 Columbia Heights, Brooklyn
BERTSCHMANN, LOUIS.....	18 Exchange Place
BICKMORE, PROF. ALBERT S.....	American Museum of Natural History
BILLINGS, MISS LAURA.....	279 Madison Avenue
BIRCHALL, W. H.....	177th Street, Bronx River
BIRD, GEORGE.....	202 Madison Avenue
BISHOP, DR. LOUIS B.....	77 Whitney Avenue, New Haven, Conn.
*BISSINGER, PHILIP.....	
BLADGEN, GEORGE.....	18 East 36th Street
BLAKE, DR. JOSEPH A.....	9 West 68th Street
*BLAKEMAN, LOUIS H.....	
BLAKESLEE, T. J.....	353 Fifth Avenue
BLISS, ERNEST C.....	30 Fifth Avenue
BLOODGOOD, ROBERT F.....	56 West 37th Street
BLOOMINGDALE, JOSEPH B.....	11 East 67th Street
BOAS, EMIL C.....	37 Broadway
BODMAN, MRS. ED C.....	835 Madison Avenue
BOEKELMAN, PROF. BERNARDUS.....	106 West 45th Street
BOETTGER, H. W.....	2144 Fifth Avenue
BOETTGER, THEODORE.....	738 East 144th Street
BOISSEVAIN, L. G.....	336 West 77th Street
BOLAND, WILLIAM A.....	31 Nassau Street
BOLTON, JOHN W.....	1777 West Farms Road
BOLTON, THOMAS, JR.....	Minford Place, Boston Avenue, City
BOND, A. H.....	64 West 46th Street
BORGSTEDE, JOHN G.....	968 Trinity Avenue
BORROWE, H. A.....	13 Central Park West
BOWDOIN, TEMPLE.....	139 East 37th Street
BOWERS, JOHN M.....	7 West 21st Street
BRADLEY, EDSON.....	45 Broadway
BRAUN, FRED.....	691 E. 143rd Street
BREEN, MATTHEW P.....	71 Broadway
BREIDENBACH, CHARLES M.....	West Farms, N. Y.
BRETT, GEORGE P.....	66 Fifth Avenue
BREWSTER, MRS. BENJAMIN.....	695 Fifth Avenue
BREWSTER, GEORGE S.....	26 Broadway
BREWSTER, WILLIAM C.....	24 East 64th Street
BRICE, STEWART M.....	693 Fifth Avenue
*BRIDGEMAN, REV. CHARLES DE WITT.....	
BRISTOL, PROF. CHARLES L.....	New York University
BRONSON, DR. EDWARD BENNET.....	123 West 34th Street

* Deceased.

BROWN, JUDGE ADDISON.....	45 West 89th Street
BROWN, WALDRON P.....	32 East 35th Street
BROWNING, WILLIAM H.....	408 Broome Street
BRYANT, DR. JOSEPH D.....	54 West 36th Street
BRYCE, MRS. WILLIAM.....	20 West 54th Street
BUDD, HENRY A.....	56 West 58th Street
BULL, DR. WILLIAM T.....	35 West 35th Street
BUNZL, MRS. JULIUS.....	537 Madison Avenue
BURDEN, JAS. A., JR.....	908 Fifth Avenue
BUTT, MCCOSKRY.....	8 West 52nd Street
CALHOUN, HENRY W.....	54 Wall Street
CALMAN, HENRY L.....	18 E. 23d Street
CAMMANN, HENRY LORILLARD.....	Box 391, N. Y. City
CAMP, FREDERICK EDGAR.....	Morris Heights, N. Y.
CANFIELD, GEORGE FOLGER.....	32 East 33rd Street
CAREY, H. T.....	12 East 41st Street
CARPENDER, WILLIAM.....	32 Pine Street
CARPENTER, PHILIP.....	38 Park Row
CARROLL, ROYAL PHELPS.....	The Cambridge
CARTER, ERNEST TROW.....	Princeton, N. J.
CARTER, WALTER S.....	176 Brooklyn Avenue, Brooklyn
CATHCART, MISS JENNIE R.....	11 East 54th Street
CHAMBERS, MATHIAS.....	182nd Street and Mohegan Avenue
CHAPMAN, FRANK M.....	American Museum of Natural History
CHICHESTER, CHARLES DARWIN.....	46 Wall Street
CHITTENDEN, JARED.....	1 West 30th Street
CHRYSTIE, WILLIAM F.....	Hastings-on-Hudson
CHURCH, F. S.....	1512 Broadway
CHURCH, WILLIAM C.....	51 Irving Place
CLARK, D. CRAWFORD.....	24 West 39th Street
CLARK, MRS. JULIA C.....	18 Gramercy Park
CLARK, L. C.....	21 West 47th Street
CLARK, WILLIAM N.....	170 William Street
CLARKE, THOMAS SHIELDS.....	50 Riverside Drive
CLARKSON, FREDERICK.....	45 William Street
CLEARY, JOHN.....	121 Madison Avenue
CLYDE, WILLIAM P.....	5 Bowling Green
COCKRAN, W. BOURKE.....	526 Fifth Avenue
COFFIN, CHARLES H.....	New Rochelle, N. Y.
COFFIN, WILLIAM E.....	66 Broadway
COHEN, SAMUEL M.....	36 West 45th Street
COLBURN, N. A.....	Murray Hill Hotel
COLLIER, PRICE.....	Tuxedo Park, N. Y.
COLLIER, P. F.....	521-549 West 13th Street
COLLINS, MRS. ELLEN.....	41 West 11th Street
COMPTON, ALEXANDER T.....	237 Broadway
COOK, FERDINAND H.....	249 West End Avenue
CORBIN, AUSTIN.....	192 Broadway

COWDIN, WINTHROP.....	15 West 11th Street
COWLES, DAVID S.....	320 Broadway
COX, CHARLES F.....	54 East 67th Street
CRAIGIE, ARCHIBALD WALPOLE.....	542 Fifth Avenue
CRANE, ALBERT.....	35 Wall Street
CRANFORD, J. P.....	Wakefield, Borough of Bronx
CRAWFORD, FRANCIS.....	24 East 42nd Street
CRUICKSHANK, JAMES.....	275 Central Park West
CUTTING, W. BAYARD.....	24 East 72nd Street
*DALY, JUDGE CHARLES P.	
DANIELS, GEORGE H.....	Grand Central Depot
DAVISON, CHARLES STEWART.....	56 Wall Street
DAVISON, G. HOWARD.....	Millbrook, N. Y.
DAY, AMASA T.....	5 East 19th Street
DEAN, PROF. BASHFORD.....	Columbia University
DE FOREST, ROBERT W.....	7 Washington Square North
DE PEYSTER, JOHNSTON L.....	Tivoli, N. Y.
DERBY, DR. RICHARD H.....	3 East 40th Street
DE RHAM, H. CASIMIR.....	Tuxedo, N. Y.
DE VINNE, THEODORE LOW.....	300 West 76th Street
DE WITT, WILLIAM G.....	10 West 30th Street
DEXTER, STANLEY W.....	71 Broadway
DICKEY, CHARLES D., JR.....	59 Wall Street
DIENST, A. P.....	Third Avenue & 140th Street
DIETRICH, CHARLES F.....	963 Fifth Avenue
DITMARS, R. L.....	1666 Bathgate Avenue
DODGE, CLEVELAND H.....	11 Cliff Street
DODGE, NORMAN W.....	81 New Street
DOMMERICH, L. F.....	314 West 75th Street
DORMITZER, MRS. HENRY D.....	27 East 74th Street
DOUBLEDAY, F. N.....	34 Union Square East
DRAKE, JOHN J.....	58 William Street
DRAPER, DR. W. H.....	19 East 47th Street
DRAZ, T.....	36 East 57th Street
DRESSSEL, J. A. H.....	313 Broadway
DROSSER, HUBERT.....	93 Nassau Street
DUNCAN, A. BUTLER.....	1 Fifth Avenue
DUNHAM, JAMES H.....	37 East 36th Street
DUNN, ISAAC L.....	680 East 175th Street
DURYEA, HARRY H.....	80 Madison Avenue
DURYEA, GEN. HIRAM.....	80 Madison Avenue
DUTCHER, WILLIAM.....	525 Manhattan Avenue
*EATON, DORMAN B.	
EDGAR, D.....	Noroton, Conn.
EDGAR, MISS JULIA L.....	28 East 39th Street
EDGAR, NEWBOLD.....	28 East 39th Street
EDGELL, GEORGE S.....	192 Broadway

* Deceased.

EGERTON, M.....	9 Leamore, London, Eng.
ELDER, MRS. MATILDA A.....	25 East 30th Street
ELLSWORTH, DUNCAN S.....	Watkins, N. Y.
ELLSWORTH, JOHN MAGEE.....	Calumet Club
ELLSWORTH, WILLIAM.....	16 Lafayette Avenue, Brooklyn, N. Y.
EMERY, JOHN J.....	5 East 68th Street
EMMET, ROBERT TEMPLE.....	New Rochelle, N. Y.
ENDEMANN, WILLIAM.....	1263 Franklin Avenue
EUSTIS, JAMES B.....	62 Madison Avenue
EVANS, MRS. CADWALADER.....	38 West 48th Street
EVANS, RICHARD.....	92 William Street
FABRI, ALLESANDRO.....	Scarborough, N. Y.
FABRI, ERNESTO G.....	Scarborough, N. Y.
FAHNESTOCK, HARRIS C.....	457 Madison Avenue
FALK, GUSTAV.....	24 East 81st Street
FARGO, JAMES C.....	56 Park Avenue
FARNHAM, PAULING.....	15 Union Square
FISHER, L. G.....	42 New Street
FLINT, THOMPSON J. S.....	Larchmont, N. Y.
FOSTER, EDWARD W.....	504 Fifth Avenue
FOSTER, L. S.....	35 Pine Street
FOSTER, M. G.....	876 St. Nicholas Avenue
FOSTER, PELL W.....	126 Liberty Street
FOSTER, SCOTT.....	395 Canal Street
FRANKFIELD, MRS. A.....	328 West 56th Street
FULDA, CARL.....	107 Kent Street, Brooklyn
FULDA, DR. CLEMENS.....	107 Kent Street, Brooklyn
FULLER, CHARLES D.....	46 West 9th Street
GARRETT, JOHN W.....	11 South Street, Baltimore, Md.
GERRISH, JOHN BROWN.....	21 Thomas Street
GIBNEY, DR. VIRGIL P.....	16 Park Avenue
GILL, GEORGE.....	164 South Fourth Avenue, Mount Vernon, N. Y.
GILLILAN, WILLIAM H.....	267 Fifth Avenue
*GILLIS, CHARLES J.....	
GILMAN, THEODORE.....	311 Palisade Avenue, Yonkers
GLEESON, JOSEPH M.....	45 East 59th Street
GODDARD, F. N.....	2 East 35th Street
GODDARD, MRS. J. WARREN.....	52 East 57th Street
GODKIN, EDWIN L.....	206 Broadway
GOLDSCHMIDT, S. A.....	12 East 58th Street
GOOD, MARTIN Q.....	233 East 88th Street
GOODHUE, MRS. C. C.....	189 Madison Avenue
GOODRIDGE, MRS. FREDERIC.....	250 Fifth Avenue
GOODWIN, REV. FRANCIS.....	Hartford, Conn.
GOTTHOLD, FREDERIC.....	165 W. 58th Street
GOULD, CHARLES A.....	Rye, N. Y.
GOULD, C. W.....	5 Washington Square

* Deceased.

GOULD, EDWIN.....	Irvington-on-Hudson, N. Y.
GOULDEN, JOSEPH A.....	2433 Creston Avenue, Fordham
GRACE, WILLIAM R.....	31 East 79th Street
GRAVES, ANDREW B.....	80 Madison Avenue
GRAY, J. H.....	317 W. 77th Street
GREENE, GEN. FRANCIS V.....	11 Broadway
GREENOUGH, JOHN.....	31 West 35th Street
GREENWOOD, ISAAC J.....	Hotel Majestic
GREER, CHARLES.....	Rye, N. Y.
GRINNELL, GEORGE BIRD.....	346 Broadway
GRINNELL, WILLIAM MORTON.....	640 Madison Avenue
GRISWOLD, CHESTER.....	23 West 48th Street
GROSSMAN, GEORGE J.....	952 Trinity Avenue
GULLIVER, W. C.....	120 Broadway
GURNEE, W. S., JR.....	8 East 33rd Street
HADDEN, DR. ALEXANDER.....	155 East 51st Street
HALSTED, MISS L. P.....	110 East 37th Street
HARBECK, CHARLES T.....	Islip, N. Y.
HARNISCHFEGER, PHILIP.....	Third Avenue near 168th Street
HARRIMAN, W. M.....	60 West 58th Street
HART, WILLIAM W.....	47 East 12th Street
HARVEY, ALEXANDER.....	Calumet Club
HASBROUCK, PRICE W.....	39 West 90th Street
HASWELL, CHARLES H.....	324 West 78th Street
HAVENS, ALBERT G.....	East Orange, N. J.
HAYDEN, HORACE J.....	337 West 76th Street
HAYNES, WILLIAM DE FOREST.....	16 East 36th Street
HAZARD, MISS MARY P.....	Peace Dale, R. I.
HECKSCHER, JOHN GERARD.....	31 West 75th Street
HEINS, GEORGE L.....	303 State Street, Albany
HEINTZ, JOHN C.....	169th Street and Third Avenue
HENDRICKS, CLIFFORD B.....	512 Fifth Avenue
HERZFELD, FELIX.....	54 Exchange Place
HIGBIE, WILLIAM HOWELL.....	36 West 35th Street
HILL, E. B.....	New Haven, Conn.
HILL, GEORGE H. B.....	Metropolitan Club
*HILL, JAMES K.....	
HILYARD, GEORGE D., JR.....	144 East 49th Street
HINTON, DR. JOHN H.....	41 West 32nd Street
HOE, MRS. ROBERT.....	11 East 36th Street
HOFFMAN, REV. E. A.....	1 Chelsea Square
HOLBROOK, MRS. F. S.....	Stamford, Conn.
HOLBROOK, MISS LILIAN.....	Stamford, Conn.
HOLT, HENRY.....	711 Madison Avenue
HOPKINS, MRS. DUNLAP.....	223 Fifth Avenue
HOPPIN, HAMILTON L.....	47 West 11th Street
HORNADAY, WILLIAM T.....	183rd Street & Southern Boulevard

* Deceased.

HOSKIER, H. C.....	26 Exchange Place
HOTCHKISS, HORACE L.....	35 Broad Street
HOYT, ALFRED M.....	1 Broadway
HOYT, JESSE.....	257 West 73rd Street
HUNTINGTON, ARCHER M.....	Baychester, N. Y.
HUNTINGTON, GEORGE.....	437 West 59th Street
HUSTED, H. B.....	276 Gates Avenue, Brooklyn
HUTCHINS, AUGUSTUS SCHELL.....	69 Wall Street
HYDE, B. T. BABBITT.....	20 West 53rd Street
HYDE, CLARENCE M.....	206 Madison Avenue
ISELIN, ADRIAN, JR.....	9 East 26th Street
ISELIN, ISAAC.....	Metropolitan Club
ISHAM, CHARLES H.....	30 East 63rd Street
ISHAM, MISS JULIA B.....	5 East 61st Street
JACKSON, FREDERIC WENDELL.....	Westchester, N. Y. City
JACKSON, THEODORE F.....	10 West 43rd Street
JACOB, LAWRENCE.....	42 East 49th Street
JACOBI, DR. A.....	110 West 34th Street
JACQUELIN, HERBERT T. B.....	34 East 38th Street
JACQUELIN, JOHN H.....	34 East 38th Street
JAMES, ARTHUR CURTISS.....	92 Park Avenue
JAMES, DR. WALTER B.....	17 West 54th Street
JARVIS, NATHANIEL, JR.....	62 East 55th Street
JENNINGS, WALTER.....	11 East 41st Street
JOLINE, ADRIAN HOFFMAN.....	1 West 72nd Street
JONES, MRS. JOSEPHINE K.....	Fifth Avenue Hotel
JONES, LEWIS Q.....	Bay View, Newport, R. I.
KANE, JOHN INNES.....	49 West 23rd Street
KANE, S. NICHOLSON.....	319 Fifth Avenue
KEECH, FRANK B.....	14 East 65th Street
KELLER, ERNEST F.....	214 West 133rd Street
KELLEY, AUSTIN P.....	37 Wall Street
KELLY, EUGENE.....	763 Fifth Avenue
KEMP, ARTHUR T.....	615 Fifth Avenue
KERSTING, RUDOLF.....	104 Fulton Street
KIMBALL, ALFRED R.....	15 Wall Street
KING, WILLIAM F.....	17 East 63rd Street
*KIP, COL. LAWRENCE.....	
KLOPSCH, LOUIS.....	100 East 17th Street
KNAPP, DR. HERMAN.....	26 West 40th Street
KNAPP, JOHN M.....	66 Broadway
KNAUTH, PERCIVAL.....	302 West 76th Street
KNIGHT, CHARLES R.....	American Museum of Natural History
KNOEDLER, ROLAND F.....	122 West 13th Street
KOCH, HENRY C. F.....	224 Lenox Avenue
KUHNE, PERCIVAL.....	22 West 56th Street
KUNHARDT, HENRY R.....	124 West 74th Street

* Deceased.

KUTTROFF, ADOLF.....	17 East 69th Street
LAGAI, DR. GEORGE.....	17 Park Place
LAMBERT, DR. ALEXANDER.....	125 East 36th Street
LONDON, FRANCIS G.....	27 William Street
LAPSLEY, DAVID.....	44 West 33rd Street
LAWRENCE, NEWBOLD T.....	51 Liberty Street
LAWRENCE, W. V.....	969 Fifth Avenue
LEAVY, DR. EDWARD N.....	166 East 61st Street
LEE, AMBROSE.....	Williamsbridge, N. Y.
LEE, PROFESSOR FRED. E.....	437 West 59th Street
LEFFERTS, MARSHALL C.....	34 East 65th Street
LE GENDRE, WILLIAM C.....	59 Wall Street
LESHER, A. L.....	9 East 75th Street
LICKMÁN, ALBERT E.....	2683 Third Avenue
LIEBENAU, ALBERT, JR.....	3492 Park Avenue
LITCHFIELD, EDWARD H.....	59 Wall Street
LIVINGSTON, GOODHUE.....	287 Fourth Avenue
*LIVINGSTON, ROBERT R.	
LIVINGSTON, WILLIAM S.....	670 Lexington Avenue
LOBENSTINE, WILLIAM CHRISTIAN.....	245 Central Park West
LOGAN, WALTER S.....	206 West 72nd Street
LORING, J. ALDEN.....	Zoological Park
LUSK, PROF. GRAHAM.....	New Haven, Conn.
LUTTGEN, WALTHER.....	25 Nassau Street
LYDIG, PHILIP M.....	Knickerbocker Club
LYMAN, FRANK.....	34 Remsen Street, Brooklyn
MCALAN, JOHN.....	4 West 84th Street
MCALPIN, CHARLES W.....	11 East 90th Street
MCALPIN, MRS. CHARLES W.....	11 East 90th Street
MCALPIN, COL. E. A.....	146 Avenue D
MCALPIN, GEORGE L.....	9 East 90th Street
MCCABE, CHARLES F.....	Fordham, N. Y.
MCCALL, JOHN A.....	54 West 72nd Street
MCCLURE, S. S.....	141 East 25th Street
McGEE, JAMES.....	26 Broadway
McGOWAN, DR. JOHN P.....	20 East 29th Street
McKIM, REV. HASLETT.....	33 West 20th Street
McLEAN, JAMES.....	16 West 55th Street
McVICKAR, EDWARD.....	267 Fifth Avenue
MACE, ARTHUR J.....	Williamsbridge, N. Y.
MACKAY, GEORGE D.....	20 West 69th Street
MAGEE, JOHN.....	Corning, N. Y.
*MALI, CHARLES.	
MALI, PIERRE.....	8 Fifth Avenue
MAPES, DANIEL, JR.....	1920 West Farms Road
MAPES, ERNEST S.....	1279 Woodruff Street, West Farms
MARLOR, HENRY S.....	Care Hatch & Foote, 3 Nassau Street

* Deceased.

MARSHALL, LOUIS.....	33 East 72nd Street
MARTIN, F. E.....	29 Pine Street
MARX, GEORGE B.....	340 East 118th Street
MAXWELL, ROBERT.....	64 Worth Street
MEAD, WALTER H.....	222 West 23rd Street
MERKEL, HERMANN W.....	976 East 175th Street
MILLER, CHARLES R.....	41 Park Row
MILLS, ABRAHAM G.....	71 Broadway
MONTANT, ALPHONSE.....	326 West 22nd Street
MOORE, FRANCIS C.....	1 West 72nd Street
MOORE, JOHN G.....	11 East 65th Street
MORGAN, MISS ANNIE T.....	219 Madison Avenue
MORGAN, J. P., JR.....	J. S. Morgan & Co., London, England
MORRIS, DAVE H.....	Westchester, N. Y. City
MORRIS, FORDHAM.....	16 Exchange Place
MORRIS, DR. LEWIS R.....	60 West 58th Street
MOTT, JORDAN L., JR.....	17 East 47th Street
MUNN, HENRY NORCROSS.....	Orange, N. J.
MURGATROYD, JOHN.....	458 Pacific Street, Brooklyn
NASH, J. WARREN.....	Union Club
NEILSON, DR. HOWARD S.....	46 West 48th Street
NICHOLS, ACOSTA.....	27 Pine Street
NICHOLS, GEORGE L.....	66 East 56th Street
NILES, MISS FLORILLA.....	Bedford Park
NILES, J. BARRON.....	66 Broadway
NILES, ROBERT L.....	66 Broadway
NILES, W. W.....	11 Wall Street
NOBLE, H. G. S.....	52 Broadway
NORTH, DR. JAMES H., JR.....	2 West 43rd Street
NOTMAN, JOHN.....	54 Wall Street
NUNAN, D.....	37 Park Row
OAKLEY, H. CRUGER.....	52 Broadway
OSBORN, MRS. HENRY F.....	850 Madison Avenue
OUTERBRIDGE, DR. PAUL.....	35 West 53rd Street
OWEN, MISS JULIETTE A.....	306 North 9th Street, St. Joseph, Mo.
OWEN, MRS. THOMAS JEFFERSON.....	23 W. 34th Street
PALMEDO, U.....	28 Exchange Place
PALMER, S. S.....	52 Wall Street
PANCOAST, RICHARD.....	28 Piatt Street
PARSONS, MRS. EDWIN.....	90th Street & Riverside
PARSONS, H. DE B.....	22 William Street
PARSONS, WILLIAM BARCLAY.....	22 William Street
*PATTERSON, J. M.....	
PEABODY, A. J.....	15 West 10th Street
PECK, THEODORE G.....	Haverstraw, N. Y.
PELL, ALFRED.....	Highland Falls, N. Y.
PELTON, FRANKLIN D.....	Calumet Club

* Deceased.

PENFOLD, WILLIAM HALL.....	10 East 40th Street
PENNIMAN, GEORGE H.....	1071 Fifth Avenue
PETERS, CHARLES G.....	13 East 76th Street
PETERS, W. R.....	23 W. 73rd Street
PHIFER, ROBERT F.....	46 West 17th Street
PIEL, GOTTFRIED.....	333 West 76th Street
PIERREPONT, JOHN JAY.....	1 Pierrepont Place, Brooklyn
PIERSON, J. FREDERICK.....	20 West 52nd Street
PINCHOT, GIFFORD.....	Department of Agriculture, Washington, D. C.
PLYMPTON, GILBERT M.....	30 West 52nd Street
POND, A. EDWARD.....	124 Fifth Avenue
PORTER, H. H.....	120 Broadway
POST, ABRAM S.....	81 Fulton Street
POST, EDWARD C.....	350 West End Avenue
POST, GEORGE B., JR.....	Mills Building
POSTLEY, CLARENCE A.....	817 Fifth Avenue
POTTS, WILLIAM BREVOORT.....	39 East 39th Street
PRATT, DALLAS B.....	24 West 48th Street
PRYER, CHARLES.....	New Rochelle, N. Y.
PYLE, JAMES TOLMAN.....	673 Fifth Avenue
PYNE, M. TAYLOR.....	52 Wall Street
RAND, GEORGE C.....	Lawrence, L. I.
RANDOLPH, L. V. F.....	61 William Street
RANDOLPH, WILLIAM W.....	31 Nassau Street
RAUCH, WILLIAM.....	Union Club
REDMOND, HENRY S.....	114 East 19th Street
REEBER, GEORGE A.....	118 East 111th Street
REYNOLDS, JAMES BRONSON.....	184 Eldridge Street
RHOADES, JOHN HARSEN.....	559 Madison Avenue
RICHARD, AUGUSTE.....	12 East 69th Street
RICHARDS, CHARLES F.....	326 W. 20th Street
RICHARDS, E. O.....	105 East 19th Street
RICHARDSON, DR. BRAXTON B.....	2057 Boston Road
RIKER, SAMUEL.....	27 East 69th Street
ROBBINS, CHANDLER.....	64 West 47th Street
ROBBINS, S. HOWLAND.....	20 East 27th Street
ROBINSON, NELSON.....	23 East 55th Street
ROBISON, WILLIAM.....	18 Wall Street
ROCKEFELLER, WILLIAM.....	26 Broadway
ROGERS, E. L.....	71 Broadway
ROLLE, AUGUST J.....	College Point, L. I.
ROOT, ELIHU.....	1626 Rhode Island Avenue, Washington, D. C.
ROSENWALD, ISAAC.....	141 Water Street
ROWLEY, JOHN, JR.....	American Museum of Natural History
RUNDE, A. THEODORE.....	3rd Avenue & 184th Street
RUNGIUS, CARL.....	107 Kent Street, Brooklyn
RUPPERT, JACOB.....	1116 Fifth Avenue
RUSSELL, ROBERT HOWARD.....	Union Club

SACKETT, CLARENCE.....	196 Madison Avenue
SACKETT, S. E.....	196 Madison Avenue
SAGE, DEAN.....	Albany, N. Y.
SALTUS, LLOYD.....	Hamilton Club, Brooklyn, N. Y.
SAUTER, FREDERICK.....	3 North William Street
SCHARMANN, H. B.....	170 West 59th Street
SCHEFER, CARL.....	40 West 37th Street
SCHIEFFELIN, WILLIAM J.....	170 William Street
SCHIRMER, RUDOLPH E.....	243 East 17th Street
SCHLATTER, CHAS. F.....	129 West 120th Street
SCHRANK, GEORGE.....	183rd Street & Jackson Avenue
SCHULTZE, JOHN S.....	59 Wall Street
SCHUMACHER, C.....	31 East 81st Street
SCHUYLER, MISS LOUISA LEE.....	135 East 21st Street
SELIGMAN, ALFRED L.....	Mills Building
SEWELL, CORNELIUS V. V.....	Rye, N. Y.
SEYMOUR, JULIUS H.....	35 Wall Street
SHAW, WALTER W.....	Care of Metropolitan Trust Co., 39 Wall Street
SHELDON, GEORGE R.....	24 East 38th Street
SHERMAN, GARDINER.....	235 West 72nd Street
SHIELDS, GEORGE O.....	23 West 24th Street
SHRADY, HENRY M.....	513 West End Avenue
SHURTLIFF, R. M.....	44 West 22nd Street
SIEGEL, JACOB.....	169th Street and Third Avenue
SIMONS, JAMES D.....	44 Broad Street
SIMPSON, JOHN BOULTON, JR.....	97 Fifth Avenue
SKIDMORE, SAMUEL TREDWELL.....	71 West 50th Street
SKIDMORE, WILLIAM L.....	49 West 52nd Street
SMILLIE, CHARLES F.....	29 East 38th Street
SMITH, DR. EDWARD A.....	105 East 18th Street
SMITH, FRANK SULLIVAN.....	54 Wall Street
SMITH, GEORGE WARREN.....	Metropolitan Club
SMITH, PHILIP S.....	46 Johnson Park, Buffalo, N. Y.
SMITH, WILLIAM ALEXANDER.....	412 Madison Avenue
SMITHERS, CHARLES.....	507 Madison Avenue
SMYTH, PHILIP A.....	57 East 127th Street
SOPER, A. W.....	150 West 59th Street
SOTSCHECK, CARL.....	1773 Clay Avenue
SPENCER, SAMUEL.....	80 Broadway
SPRING, MISS ANNA RIKER.....	434 Madison Avenue
SQUIBB, DR. E. H.....	148 Columbia Heights, Brooklyn
STANDISH, MRS. MYLES.....	27 Fifth Avenue
STARIN, JOHN H.....	Pier 13, North River
STEBBINS, JAMES H.....	80 Madison Avenue
*STECHERT, GUSTAV E.....	
STERN, ISAAC.....	858 Fifth Avenue
STEWART, WILLIAM R.....	31 Nassau Street

* Deceased.

STIMSON, DR. DANIEL M.....	11 West 17th Street
STOKES, H. B.....	New Rochelle, N. Y.
STOKES, J. G. PHELPS.....	229 Madison Avenue
STONE, MASON A.....	244 Central Park West
STONEBRIDGE, CHARLES H.....	2656 Third Avenue
STONEBRIDGE, G. E.....	1845 Vanderbilt Avenue
STONEBRIDGE, WM.....	951 E. 184th Street
STORCK, GEORGE H.....	30 West 9th Street
STOW, GEORGE C.....	49 E. 25th Street
STRATFORD, PROF. WILLIAM.....	263 West 52nd Street
STUART, INGLIS.....	69 Wall Street
STURGES, FREDERICK.....	36 Park Avenue
STURGES, HENRY C.....	56 East 34th Street
STUYVESANT, RUTHERFURD.....	18 Exchange Place
SULLIVAN, MRS. JAMES.....	36 Park Avenue
SWAYNE, FRANCIS B.....	Riverside Avenue and 90th Street
SYMS, DR. PARKER.....	50 West 47th Street
TAYLOR, MISS ALEXANDRINA.....	48 West 59th Street
TAYLOR, DWIGHT W.....	500 Madison Avenue
TAYLOR, GEORGE.....	8 West 126th Street
TAYLOR, HERBERT C.....	52 Broadway
TEFFT, F. GRISWOLD.....	Manhattan Club
TEFFT, WILLIAM E.....	22 East 64th Street
TERRY, REV. RODERICK.....	169 Madison Avenue
TESLA, NIKOLA.....	46 East Houston Street
THACHER, MRS. GEORGE W.....	Park Avenue Hotel
THAYER, HARRY BATES.....	57 Bethune Street
THOMAS, SAMUEL.....	17 West 57th Street
THOMPSON, ROBERT MEANS.....	99 John Street
THOMPSON, PROF. W. GILMAN.....	34 East 31st Street
THOMSON, DAVID.....	14 East 73rd Street
THOMSON, GIRAUD F.....	141 Broadway
THORNE, NEWBERRY D.....	New Rochelle, N. Y.
THORNE, W. V. S.....	Metropolitan Club
TIFFANY, LOUIS C.....	7 East 72nd Street
TILFORD, HENRY M.....	3 West 46th Street
TILLINGHAST, WILLIAM H.....	22 East 64th Street
TILT, ALBERT.....	5 East 67th Street
TOD, J. KENNEDY.....	45 Wall Street
TOEL, WILLIAM.....	20 East 67th Street
TOOTHE, WILLIAM.....	Madison, N. J.
TOWNSEND, HOWARD.....	29 West 39th Street
TOWNSHEND, JOHN.....	302 West 73rd Street
TOWS, COE DOWNING.....	Union League Club
TRASK, SPENCER.....	27 Pine Street
TROWBRIDGE, EDWIN D.....	123 East 39th Street
TROWBRIDGE, FREDERICK K.....	115 E. 37th Street
TURNBULL, ROBERT J.....	6 W. 47th Street

TURNURE, GEO. E.....	115 E. 36th Street
*TURNURE, LAWRENCE.	
TYTUS, ROBERT DE PEYSTER.....	10 East 77th Street
UNDERWOOD, JOHN A.....	2339 Bathgate Avenue
UPP, THOMAS M.....	57 West 137th Street
VALENTINE, DR. WILLIAM A.....	45 West 35th Street
VAN BRUNT, C. H.....	10 East 46th Street
VAN CORTLANDT, AUGUSTUS.....	Tuxedo Park, N. Y.
VANDERPOEL, MRS. JOHN A.....	224 Madison Avenue
VAN EMBURGH, D. B.....	30 East 38th Street
VAN NEST, G. WILLETT.....	345 Fifth Avenue
VAN PELT, GILBERT S.....	123 East 69th Street
VAN WINKLE, EDGAR B.....	115 East 70th Street
VICKER, H. MONTAGUE	7 Wall Street
VIELE, HERMAN K.....	12 West 18th Street
VIVANTI, FERRUCCIO ANSELMO.....	995 Madison Avenue
VORCE, A. D.....	353 Fifth Avenue
WADSWORTH, CLARENCE S.....	177 Commonwealth Avenue, Boston
WADSWORTH, W. P.....	25 East 30th Street
WAGSTAFF, C. DU BOIS.....	Babylon, L. I.
WANNINGER, CHARLES.....	1143 Park Avenue
WARD, CHAS. H.....	159 West 73rd Street
WARDWELL, WILLIAM T.....	21 West 58th Street
WATERBURY, JOHN I.....	20 Wall Street
WATSON, CHARLES F.....	South Orange, N. J.
WEBB, G. CREIGHTON.....	47 E. 44th Street
WEBB, DR. W. SEWARD.....	Shelbourne, Vt.
WEBER, LOUIS.....	9 East 93rd Street
WELLINGS, JOSEPH G.....	628 West 147th Street
WELLS, OLIVER J.....	Waldorf Hotel
WHITE, JOHN JAY.....	103 East 57th Street
WHITE, LEONARD D.....	39 East 74th Street
WHITE, STANFORD.....	160 Fifth Avenue
WHITE, S. V.....	7 Wall Street
WHITNEY, CASPAR.....	254 Madison Avenue
WHITNEY, HARRY PAYNE.....	2 West 57th Street
WIGGIN, FREDERICK HOLME.....	55 West 36th Street
WILLARD, E. A.....	132 Front Street
WILLIAMS, G. G.....	34 West 58th Street
WILLIS, CHARLES T.....	309 West 82nd Street
WILMERDING, GUSTAV L.....	135 Madison Avenue
WINTHROP, EGERTON L.....	23 East 33rd Street
WINTHROP, R. DUDLEY.....	Knickerbocker Club
WITHERBEE, FRANK S.....	40 Wall Street
WOLFF, EMIL.....	115 West 70th Street
WOOD, ARNOLD.....	40 East 35th Street
WOOD, GILBERT CONGDON.....	126 East 37th Street

* Deceased.

WOOD, J. WALTER.....	South Orange, N. J.
WOOD, J. WALTER, JR.....	Short Hills, N. J.
WOOD, WILLIAM C.....	51 Fifth Avenue
WOOD, WILLIAM H. S.....	45 East 10th Street
WOODHOUSE, J. S.....	124 West 93rd Street
WOODWARD, F. F.....	Hotel San Remo
WOOSTER, NOYES C.....	38 West 35th Street
WORTHINGTON, CHARLES C.....	214 Broadway
WORTMAN, DR. J. L.....	Peabody Museum, New Haven, Conn.
WRIGHT, J. DUNBAR.....	346 Lexington Avenue
WRIGHT, J. HOWARD.....	346 Lexington Avenue
WRIGHT, MRS. MABEL OSGOOD.....	118 West 11th Street
YOUNG, FREDERICK STAFFORD.....	11 West 19th Street
YOUNG, RICHARD N.....	18 West 21st Street
ZABRISKIE, ANDREW C.....	2 West 56th Street

Corresponding Members.

BROWN, HERBERT	Tucson, Arizona
BROWN, WILLIAM HARVEY.....	Salisbury, Rhodesia, South Africa
EATON, HOWARD.....	Medora, North Dakota
ELROD, M. J.....	Missoula, Montana
GRAHAM, W. H. H.....	Winnipeg, Manitoba
HUFFMAN, L. A.....	Miles City, Montana
MCCARTY, JOHN.....	Phoenix, Arizona
PHILLIPS, MICHAEL.....	Seattle, Washington
SELOUS, PERCY.....	Greenville, Michigan
STONE, A. J.....	Missoula, Montana

Summary of Membership.

To APRIL 1, 1900.

Total number of Founders.....	19
“ “ Associate Founders.....	8
“ “ Patrons	41
“ “ Life Members.....	87
“ “ Annual Members.....	612
Total of all classes.....	767
Members deceased, 1899-1900.....	19

CONDITIONS OF MEMBERSHIP:—Any two members of the Society may recommend candidates for membership, and all members are requested to add to the working strength of the organization by enlisting the interest of their relatives and friends. There is no initiation fee. The annual dues for Annual Members are \$10.00. The Life Member's fee is \$200; Patron's fee, \$1,000; Associate Founder's fee, \$2,500; Founder's, \$5,000; Benefactor's, \$25,000.

Application blanks will be supplied by the Secretary upon request.

Each member of the Society receives, upon payment of his dues, a Member's ticket, entitling him to admission to the Park on closed days, and catalogues and other publications of the Society. Members are also entitled to ten complimentary tickets, each admitting two persons to the Park on closed days.

The fiscal year of the Society ends on May 1st. Dues of members joining between January 1st and May 1st of any year are credited to the following year.

Application blanks will be supplied by the Secretary upon request.



COPYRIGHT, 1900, BY THE NEW YORK ZOOLOGICAL SOCIETY.

SCULPTURED CORNICE OF REPTILE HOUSE.





REPORT OF THE EXECUTIVE COMMITTEE.

The Executive Committee takes great pleasure in recording the fact that, after four years of preparation, the Zoological Park was finally opened to the public on November 8, 1899. Between the opening day and January 1st it was visited by no less than 90,000 people, in spite of inclement weather, the unsettled condition of the walks and paths, and the difficulty of access.

The public has accepted with good nature the many evidences of incompleteness, and the buildings and animals have met with almost universal praise. A visit to the Park upon a fine afternoon will satisfy anyone that the original scheme of the Society, which led to the setting aside of this fine tract of land for its present purpose, was well conceived, and that the Park is destined to be one of the most attractive, useful, and beautiful features of the City of New York.

From these facts the Committee derives much encouragement, and extends its congratulations to the Board of Managers and the Members of the Society, who by their generous contributions and interest have made it possible to bring the Park to its present state of development.

The Committee has constantly kept in mind the fact that the most important objects must first be provided for, that the backbone of the work is the proper conception of a general plan and its development, so as to provide for the growth which surely awaits the Society in the future. Thus, many details of our general scheme, while useful and important, have been necessarily postponed until time and means can be found for their prosecution.

MEMBERSHIP.

As we look forward to the future permanent financial support of our undertaking, it appears that, if the membership list can be increased to correspond with those of similar societies in London, Antwerp, and Berlin, the Annual Membership Fund will not only be adequate to constantly renew the supply of animals,

but also, by careful handling, to add a new building to the Park every other year. As the Park increases in popularity the membership lists will undoubtedly increase. All our members are invited to co-operate with the Executive Committee by enlisting interest and obtaining new members. Our present membership numbers over 750. The most important and successful of the foreign societies are supported by the membership of several thousand persons. For example, the Zoological Society of London contains 3,000 members, those of Antwerp and Amsterdam about 5,000 members. As the visits of the public to the Park increase, the right of free admission on pay days will be increasingly attractive. Furthermore, the Society, when relieved of the present pressing necessity of establishing the Park, will be able to do more for its members in the way of publications, distribution of photographs, attractive public lectures, art exhibitions, and similar advantages.

ARTISTIC AND SCIENTIFIC TREATMENT OF THE PARK.

Altogether, \$20,693.38 has been expended up to the present time upon plans. The Committee has at all times been of the opinion that the success of the Zoological Park would depend as largely upon its æsthetic attractions as upon its popular exhibition of animals; and we have, therefore, continued to study and develop the larger and smaller features of the general design, termed "The Final Plan," which was approved by the Park Department and by the Mayor in 1897.

None of the general features of this plan have been or will be departed from. It has been found necessary to change the location of one building only—that is, the workshops, originally placed on the east side of the Elephant Court. This change was made upon the urgent advice of Warren H. Manning, a well-known Boston landscape architect, who gave several months' study to the general plan, but was obliged through pressure of other work to resign his connection with the Zoological Park. The new location of the workshops is a much wiser one, and, being in the administrative centre of the Park, it will reduce the cost of Park service to a minimum. No other material changes in the location of buildings appeared to be necessary.

Mr. Manning, who was engaged to make detailed studies for

the Northern Concourse and entrance to Baird Court, in consultation with the architects of the Park, presented a number of detailed drawings based upon the original plan. The Executive Committee took these, as well as the whole plan of this important part of the Park, into very careful consideration in connection with the necessity of providing, first, for a very commodious entrance for carriages at the north entrance and approach to the main restaurant; secondly, provision for motor vehicles and a motor road; and, thirdly, for the accommodation of large crowds of people upon Baird Court. Taking into view all these conditions, part of which have grown out of experience acquired in the actual operation of the Park, it was finally decided by the Executive Committee not to carry out the excessively formal detailed treatment included in the "final plan," but to adopt a treatment less formal and less expensive. At the same time we decided to alter the main axis of Baird Court a few degrees, so as to make it parallel with the line of trees on the west side of the Court, and to allow space for a pathway for motor carriages between the west side of the Court and the western line of trees, as well as to preserve certain natural features of great beauty. This resolution, which was the result of prolonged study and consideration, both of the practical and artistic treatment of this area, was unanimously adopted on July 12, 1899, approved immediately thereafter by the Park Department, and went into operation by the contract for levelling Baird Court, which was let on September 7, 1899.

This work began on October 16th. In the autumn, upon the advice of Mr. De Wolf, Landscape Architect of the Park Department of Greater New York, the Committee engaged Mr. H. A. Caparn for the detailed study of the Concourse and the paths approaching Baird Court from the north. In consultation with Mr. De Wolf and the Chairman, this resulted in the production of an attractive and satisfactory approach to the Court, providing amply for access for carriages to the restaurant and to the south side of Lake Agassiz, and bringing about a treatment quite in sympathy with the beautiful natural features of this portion of the Park, and less expensive in construction. Mr. Caparn is now engaged upon the details of Baird Court and its connections on the south.

In a similar spirit the plans of the original buildings are re-

ceiving the most careful renewed study and attention. The Rocking Stone Restaurant, while a building of no great size or elaboration, required months of study before the Committee was entirely satisfied that it had secured an artistic, practical, economical plan for a building which can be maintained inexpensively during the long winter months, when the patronage of this restaurant will be comparatively small, and at the same time be capable of sudden expansion of patronage on popular days. Numerous consultations were held with the architects, and with Mr. Manning, before the building was precisely located and a plan secured, which, it is believed, will be thoroughly worthy of its beautiful site overlooking Beaver Valley. In a similar manner, we are learning from experience and observation certain new principles which will be applied to alterations of detail in the large new buildings which we are about to construct.

The Aquatic Birds' House has enjoyed the artistic co-operation of Mr. A. Phinister Proctor in the design of the pediments, and in the Pelicans upon its corners; also of Mr. Robert Blum, who generously executed the charming mural paintings at the back of the wall cages at a nominal cost—a feature which has proved both attractive and satisfactory. After a careful observation of the birds in the central flying cage, the Assistant Curator, Mr. Beebe, reports that they would benefit by an increase of sunlight, and that the design of this building would have been improved if the roof had been wholly constructed of glass, as called for in the Directors' original design. Hereafter, glass-roof construction will be employed more extensively, especially in the houses to be occupied by animals which are sensitive and sun-loving.

ENTRANCES.

It has also become necessary to look ahead to the future in the matter of entrances.

The present entrances of the Park are cheaply constructed and temporary, and, as the Park becomes more central in the growth of the city, and the means of approach by carriage and by rail are developed, it is obvious, not only that it must be surrounded by an appropriate iron fence supported upon a granite base of an absolutely permanent character, but that the various entrances must be spacious, beautiful, and appropriate in design.

At the proper time it is hoped consideration can be given to enhancing the beauty of the Park by the use of sculpture, as well as by tasteful architecture and interior mural paintings. In this way, by the selection of animal types characteristic of Maine, Oregon, Texas, and of Florida, and by their appropriate use in connection with the entrances we may give the Park a national or North American character. It has not yet been finally decided how these designs shall be prepared, but the Society and the public may rest assured that, as in all other matters relating to the planning of the Park, the entrances will have the most careful artistic consideration.

BUILDINGS AND ANIMALS PROVIDED BY THE SOCIETY.

All expenditures for buildings or animals by the Society are made from what is known as the Park Improvement Fund. This is distinct from our General Fund, which is composed chiefly of membership fees. Donations to the Park Improvement Fund should be distinctly so designated, it being understood that all contributions thus received will be expended for buildings or animals, according to the judgment of the Executive Committee. Up to January 1, 1900, the total expenditures were as follows:

In the purchase of animals	\$8,540 72
In the construction of buildings and other installations	140,085 56

The details regarding the various varieties of fine animals which have thus far been presented to the Park are found in the Director's report. The list of buildings and other installations thus far erected are as follows:

- No. 43.—Mule Deer Range.
- “ 58.—Fallow Deer Range and House.
- “ 57.—Axis Deer Range and House.
- “ 3.—Ducks' Aviary.
- “ 4.—Flying Cage.
- “ 5.—Aquatic Birds' House.
- “ 56.—Black-tail Deer Range.
- “ 42.—Virginia Deer Range.
- “ 41.—Red Deer Range and House.
- “ 40.—Caribou Range and House.
- “ 30.—Moose Range and House.

- No. 38.—Elk Range and House.
 “ 15.—Wolf Dens.
 “ 15a.—Fox Dens.
 “ 20.—Aquatic Mammals' Pond.
 “ 21.—Otter Pool.
 “ 30.—Antelope Range and House.
 “ 26.—Prairie Dogs' Enclosure.
 “ 22.—Burrowing Rodents.
 “ 23.—Small Mammal House (temporary).
 “ 62.—Wild Turkeys' Enclosure.
 “ 27.—Reptile House.
 “ 28.—Crocodile Pool.
 “ 31.—Bear Dens.
 “ 33.—Beaver Pond.
 “ 36.—Buffalo Range and House.

The generous and welcome subscriptions to the Park Improvement Fund up to April 1, 1900, have been as follows:

LEVI P. MORTON	\$5,000 00
OSWALD OTTENDORFER	5,000 00
WILLIAM K. VANDERBILT	5,000 00
PERCY R. PYNE	5,000 00
WILLIAM E. DODGE	5,000 00
ROBERT GOELET	5,000 00
J. PIERPONT MORGAN	5,000 00
JACOB H. SCHIFF	5,000 00
WILLIAM D. SLOANE	5,000 00
WILLIAM C. WHITNEY	5,000 00
C. P. HUNTINGTON	5,000 00
HENRY A. C. TAYLOR	5,000 00
GEORGE J. GOULD	5,000 00
CORNELIUS VANDERBILT	5,000 00
ANDREW CARNEGIE	5,000 00
SAMUEL THORNE	5,000 00
MRS. ANTOINETTE ENO WOOD	5,000 00
MISS HELEN MILLER GOULD	5,000 00
MRS. JOHN B. TREVOR	5,000 00
JOHN L. CADWALADER	2,500 00
JOHN S. BARNES	2,500 00

PHILIP SCHUYLER.....	\$2,500 00
F. AUGUSTUS SCHERMERHORN	2,500 00
TIFFANY & Co.....	2,500 00
MORRIS K. JESUP	2,500 00
EDWARD J. BERWIND	2,500 00
CHARLES W. HARKNESS	2,000 00
A. NEWBOLD MORRIS	1,000 00
HENRY F. OSBORN	1,000 00
WILLIAM H. WEBB	1,000 00
CHARLES T. BARNEY	1,000 00
MRS. WILLIAM H. OSBORN	1,000 00
HENRY W. POOR	1,000 00
GEORGE CROCKER	1,000 00
GEORGE T. BLISS	1,000 00
WILLIAM C. SCHERMERHORN	1,000 00
J. HOWARD FORD	1,000 00
WILLIAM C. OSBORN	1,000 00
ABRAM S. HEWITT	1,000 00
H. MCK. TWOMBLY	1,000 00
JAMES C. CARTER	1,000 00
H. O. HAVEMEYER	1,000 00
H. H. COOK	1,000 00
GEORGE F. BAKER	1,000 00
JAMES B. FORD	1,500 00
NEWBOLD MORRIS	1,000 00
MISS EVA VAN CORTLANDT MORRIS	1,000 00
ROSWELL P. FLOWER	1,000 00
LISPENARD STEWART	1,000 00
MISS CAROLINE PHELPS STOKES	1,000 00
JOSEPH STICKNEY	1,000 00
SAMUEL D. BABCOCK	1,000 00
A. WOLFF	1,000 00
CORNELIUS N. BLISS	1,000 00
MRS. JOSEPH STICKNEY	1,000 00
MRS. A. NEWBOLD MORRIS	1,000 00
MISS PHEBE ANNA THORNE	1,000 00
EDWIN THORNE	1,000 00
VICTOR C. THORNE	1,000 00
JOEL W. THORNE	1,000 00
SAMUEL THORNE, JR.....	1,000 00

HUGH J. CHISHOLM.....	\$1,000 00
S. BRINCKERHOFF THORNE	1,000 00
Miscellaneous subscriptions	3,310 00
Interest on subscriptions	3,663 22
Transfers	3,833 32

Total to January 1, 1900.....\$161,806 54

SUBSCRIPTIONS RECEIVED AFTER JANUARY 1, 1900.

MRS. PERCY R. PYNE	\$1,000 00
WILLIAM C. OSBORN	500 00
CHARLES T. BARNEY	1,500 00
CHARLES T. BARNEY (Loan).....	500 00
ADRIAN ISELIN	1,000 00
CASH	100 00
HUGH J. CHISHOLM	50 00

Total April 1, 1900\$166,456 54

Contributions to the Park Improvement Fund will be welcome either in the form of subscriptions or in the form of donations of some of the larger buildings. Apart from the Lion House and the Monkey House, hereinafter provided for, there are four large and attractive buildings needed, namely:

Antelope House,
The Large Bird House,
The Administration Building,
The Small Mammal House.

Either of these buildings would constitute an extremely attractive single gift.

No gift can be made to the City of New York of a more welcome character, or likely to give more pleasure and instruction to great numbers of people, than a gift of one of these buildings, and donors may rest assured that such buildings will be so well filled and maintained as to render them a constant source of pleasure to themselves.

ART.

Among other projects which are slowly maturing is the formation of a Society of Animal Painters and Sculptors in conjunction with the Zoological Park. Considerable substantial progress has been made in this direction, and before many months the project will assume distinct form.

PUBLICATIONS.

We have thus far barely entered upon the field of publication. The admirable guide-book, prepared by the Director, Mr. Hornaday, has proven very popular, and has met with large sales. During the past year the Society was too busy to publish Bulletins, but it is hoped that hereafter this publication can appear at regular intervals, informing members of all additions in the way of new exhibitions and collections. The scientific work of the Society, and the advantages to be taken for observation upon the life habits of rare types which we have now brought together have also been postponed in behalf of construction work, but the members of the Society may rest assured that this side of our work will be strongly developed in the future.

PHOTOGRAPHY.

Considerable progress has been made in photography, and we will shortly print our list of photographs of living animals, many of which are beautiful and also extremely interesting as presenting perfect representations of the finest types of North American and exotic animals as seen to the best advantage in their natural surroundings. These photographs are for sale at very reasonable figures, and they are already finding their way into a variety of educational and artistic uses.

ANIMAL FUND.

A special fund has been started, known as the "Animal Fund," which, as required by our agreement with the City, is replenished from gate receipts, checking privileges, sale of guide-books and photographs; in fact, from all the various small and large

amounts of money received in the Park. This fund will be increased during the coming year, but from the sources indicated it never will reach any considerable figure, and for the increase of the collections the Society must rely upon the generosity of its members. Gifts of desirable animals will be most welcome at all times. It affords us much pleasure to publish elsewhere in this volume a complete list of the gifts which have been received during the past year.

EXPENDITURES BY THE CITY.

On March 17, 1899, \$63,000, the balance of the \$125,000 appropriated by law in 1897 for improvement of the grounds, became available. Of the total \$125,000 appropriated to date, \$104,215.26 has been expended by the City for improvements, which are fully described in the report of the Director, leaving a small balance of \$20,784.74 to be expended in the improvement of the walks, in erecting a Shelter Pavilion, guard rails, drinking fountains, etc.

The large acreage of the Park which was taken over by the Society in an absolutely wild condition has necessitated the expenditure of large amounts for sewers, drains, and other improvements which do not appear upon the surface, so that the amount expended in walks and in fencing has thus far been comparatively small, and no permanent guard-railing has been erected. The system of walks needs great extension and improvement to accommodate the large and constantly increasing crowds of visitors.

By chapter 432, of the Laws of 1900, the Board of Estimate and Apportionment has power to provide \$300,000 for the further improvement of the grounds and Park, when the Society shall have raised the sum of \$200,000 for its share of the development of the Park. By the time this sum becomes available the detailed plans upon which the expenditures are to be made will be completed. The work which can be accomplished by this appropriation is mainly as follows:

1. The extension of the system of walks, sewers, water supply, and general drainage.
2. The completion of the Pelham Avenue or north carriage entrance and concourse, and extension of the motor road.
3. The surfacing with asphalt of certain much-used walks.



COPYRIGHT, 1900, BY THE NEW YORK ZOOLOGICAL SOCIETY.

A PORTION OF THE ELK HERD.
Gift of Gen. J. Gould, Esq., and the Brooklyn Park Department.



4. The erection of a pavilion and carriage shelter at the north entrance.
5. The improvement of the lower end of Lake Agassiz in connection with the waterfall.
6. The erection of a storehouse and workshop building, ice-house, etc.
7. The erection of houses for carnivora and for primates.
8. The erection of a small greenhouse for propagating purposes.
9. The planting of suitable trees, shrubs, and plants along the borders of the Park, in large game ranges, and elsewhere.

With this work accomplished, which will require about two years, the grounds will have a finished appearance, and the institution will be still more worthy of public interest and support. While in the nature of things it is impossible that so large a work can be completely and satisfactorily finished immediately, after this expenditure the Zoological Park will be placed upon an attractive and permanent footing.

MAINTENANCE FUNDS FOR 1899 AND 1900.

When the Society first appeared, in May, 1896, before the Commissioners of the Sinking Fund for the purpose of securing the grant of land now occupied by it, the sum of \$100,000 per year was named as the probable amount needed annually for maintenance after the Zoological Park was fully established. Recognizing, however, the fact that with the completed area comparatively small, and animals coming in slowly, the first requirements for maintenance would be less than that sum, the Committee estimated \$60,000 as the amount absolutely necessary *for the first year*. By reason of this understanding, the following clause was incorporated in the Society's agreement with the City, dated March 24, 1897:

"Sixth: The City of New York shall annually provide the necessary funds for the maintenance and care of the Zoological Gardens, the buildings, enclosures, and other improvements made from time to time therein, and the animals and collections of said Society; but the appropriation for the first year is not to exceed sixty thousand dollars."

This amount was also named in the Charter of Greater New York as the amount for maintenance for the first year.

THE YEAR 1899.

Under these circumstances, the Society applied, in 1898, for \$60,000 with which to maintain the Park during the year 1899. One-half of this amount, \$30,000, was granted to the Society for "six months," as the City did not anticipate that the Park would require a maintenance fund before the first of June. As a matter of fact, expenditures from this fund became necessary immediately after the first of January, and the amount required increased each month for the pay of the necessary force of gardeners, watchmen, laborers, and other employees which had to be provided. With the arrival of live animals, food and attendance had to be at once provided. From May onward, animals arrived continuously, and the maintenance fund for 1899 was exhausted soon after the first of November of that year.

At no time was the Park closed to the public, and the Society submitted to considerable inconvenience and hinderance rather than prohibit the public from watching the progress of the work and inspecting such animals as had been received. The animals were put on exhibition as rapidly as quarters could be provided for them, and, long before the official opening, crowds of people visited the Bear Dens, the Buffalo Ranges, and the installations of the various deer.

The appropriation for 1899 was thus exhausted early in November, and the Society maintained the Park at its own expense during the months of November and December, at a cost of \$7,038.61.

THE YEAR 1900.

During the summer of 1899 the Society applied for a maintenance of \$70,000 for the year 1900, including \$10,000 for the care of the grounds, for forestry, and for planting. A forestry appropriation was rendered necessary by the large amount of work absolutely required to save many of the trees from dying through decay, drought, thin soil, and other causes. The fine forest on the east side of the river has been entirely neglected. Much work has been done on the forest west of the Bronx River, resulting in great benefit; but work of this description does not make much impression, as its effects are not easily seen and appreciated by the public. This item of \$10,000, however, did not meet with the

approval of the Park Commissioner of the Bronx, and \$60,000 was the amount of the maintenance fund named by the Park Department in its application for the Park for 1900. In the general cutting down of the appropriation, the amount finally allowed the Society was only \$40,000.

This amount is totally inadequate to provide for the maintenance of the Park during the current year on its present basis, even without allowance for the constantly increasing number of animals and the additional force required to manage the increasing crowds of visitors. Five thousand dollars per month is the very lowest amount that can possibly serve to maintain the Park at present. Every item of expense has been cut to its lowest point, the men employed in the Park are now overworked and underpaid, in summer the present force will be quite inadequate, and current expenses cannot be reduced any further.

The Central Park Menagerie receives \$32,500, and the Aquarium, with its single building and few employees, has \$40,000, although in these popular institutions neither of these amounts is too large for the work done. It is obvious that the needs of a Park of 261 acres—every acre of which requires constant care—with 183,000 square feet of walks and roads already constructed, with a requirement of sixty permanent employees, with six entrances, twenty-four buildings and other installations for animals, all requiring continuous attention, and for several constant heat during the winter months, cannot possibly be met by an expenditure of \$40,000 a year.

It is probable that in a comparatively short time visitors to the Zoological Park will be far more numerous in proportion to its area than to Central Park, because people are attracted from all parts of Greater New York.

With the exception of this inadequate maintenance, which your Committee feels was due to a misapprehension of the pressing needs of the Park rather than to a lack of interest on the part of the City authorities, your Committee desires to acknowledge the co-operation of the various City officials, and the good-will shown to the Park by the Mayor, the Comptroller, Corporation Counsel, and especially the Hon. August Moebus, Park Commissioner for the Borough of the Bronx, the Engineers, Messrs. Ulrich and Schermerhorn, in charge of the City's work at the Park, as well as the official Landscape Architect of New York City, Mr. John De Wolf.

DEFICIT IN 1900.

No plan has yet been suggested, either by the Executive Committee or by the City authorities, to meet the inevitable deficit for the year 1900. The matter is under careful consideration by the Executive Committee. The expenses have been cut down to the lowest point, and even now the Committee feels that the Society, owing to this enforced economy, may be held subject to criticism for insufficiently caring for the Park.

CONCLUSION.

In addition to the above, the work of your Committee, in co-operation with the Director and his staff, has comprised plans for the future treatment of the forest, for the purchase and care of animals, for the scientific classification and labelling of the exhibits, formulation of rules for the policing and care of the Park, obtaining reduction of freight rates and facilities for the proper transportation of animals consigned to the Society.

In conclusion, the Committee cannot speak too highly of the services of the Director of the Park, Mr. William T. Hornaday. His ability, energy, and devotion to the interests of the Park have rendered possible the rapid progress of the past year. He has been efficiently aided by the Assistant Curators, Messrs. Ditmars, Loring, and Beebe, in charge of Reptiles, Mammals, and Birds, respectively; by Messrs. Puffer and Beerbower in the construction department; by Mr. Mitchell in the department of accounts; and by Mr. Merkel, Chief Forester, in the important work of grading and seeding, hothouse and nursery work, Park service and general forestry. In fact, the whole administrative system which has been built up and systematized in the Park during the past year seems to be beyond criticism.

Constant difficulties are met in new enterprises of this character, far too numerous to be reported upon. Their name is legion. As fast as one series is grappled with and put out of the way, new difficulties appear. But this condition is inherent in the progress of all public works of this character; and all obstacles must be met with constant alertness and courage.

The Committee appreciates the continued confidence and support which has been afforded by the members of the Board and of

the Society, and trusts that in the future even greater personal active interest will be taken by all in the development of the Park.

Respectfully submitted,

LEVI P. MORTON, *President.*

HENRY F. OSBORN, *Chairman.*

JOHN L. CADWALADER,

CHARLES T. BARNEY,

WILLIAM WHITE NILES,

MADISON GRANT,

PHILIP SCHUYLER,

JOHN S. BARNES.

FORM OF BEQUEST.

*I do hereby give and bequeath to the "NEW YORK ZOOLOGICAL
SOCIETY," of the City of New York,*.....

.....

.....

REPORT OF THE DIRECTOR OF THE NEW YORK ZOOLOGICAL PARK TO THE BOARD OF MANAGERS.

At last the spell has been broken; and to-day, though very incomplete, the Zoological Park of Greater New York is an accomplished fact. The foundation has been laid, and a goodly portion of the superstructure has been completed and occupied. The people as a whole have done a portion of the goodly work, but private generosity and private enterprise have done more.

But our task is only one-third of the way toward completion. The private effort represented by the Zoological Society stands pledged to donate \$75,000 more within eighteen months, and the people should now provide \$300,000 for the continuation of the improvements which are needed to render the Zoological Park more completely available for the use to which it has been devoted. In view of the fifty years of delay that have elapsed in the founding of this institution, both the sums named above should be furnished promptly and cheerfully, in order that we may, to some extent, make up for lost time. It is beneath the dignity of Greater New York to allow this enterprise, involving but a comparatively small expenditure, to languish and halt through lack of additional funds. Assuming that all those who have contributed toward the work of the Society will be interested in the business methods and work of their representatives, this is the story, in brief, of the past year's efforts in the creation of New York's Zoological Park.

WORK OF THE ZOOLOGICAL SOCIETY.

The beginning of the year 1899 revealed less progress in improvements generally than had been hoped for. Instead of being walled and roofed, the Reptile House had not risen above its foundations. The Bird House was roofed with boards, but it was a mere empty shell, standing over an ice-bound reservoir of water, for which escape was impossible. The Birds' Valley sewer, for which the Director had labored so persistently in order that



COPYRIGHT. 1900, BY THE NEW YORK ZOOLOGICAL SOCIETY.

SIDE CAGES IN THE BIRD HOUSE.



it might relieve the Bird House, and make possible the erection of the Flying Cage, was begun so late in 1898 that the severe winter weather delayed its completion until spring.

The winter of 1898-99 began on November 24, 1898, and held the Zoological Park with a grip which never relaxed until March 1, 1899. The snowstorm of Thanksgiving week stopped all work by the Park Department on the Aquatic Mammals' Pond, and for nearly five months left the excavation an expanse of black muck. The contract for the construction of roads, walks, sewers, and water lines was approved so late in the year that no work under it was possible until the spring of 1899. This left the Park for the entire winter without the service road which it was hoped could be built in 1898. The delay in the building of the service road resulted in such distress to all parties who were obliged to haul building materials into the Park that the numerous disasters to teams compelled the Society to expend nearly \$2,000 in building temporary roads of plank and stone.

During the winter, in all mild weather, the Park roads were extremely muddy. The Society maintained its bureau of administration in the Park and improved each day of working weather. Contractors were urged forward, and co-operated with in many ways. At the earliest opening of spring, work began all along the line, and by May 1st the Park presented a scene of general activity. Walks were excavated and filled with stone, trenches were dug for sewers and water pipes, and the Park became a chaos of upheaved earth, yawning pits, piles of stone, sand, and iron, tool-houses, trucks, carts, horses, and men. For a long period the number of teams engaged in hauling heavy materials into the Park, and working on the grounds, was seldom less than forty, and some weeks numbered over sixty. At one time work proceeded simultaneously at twenty-six different points. The working hours of the officers in charge extended from early morning until nearly sunset, and holidays and vacations were luxuries in which they could not indulge.

CONTRACT WORK.

As far as possible the work of the Society was given out by contract to the lowest bidder. The following is a list of the principal firms and individuals who executed contract work for the

Society on its buildings, dens, aviaries, and other installations for animals: (For a list of the contracts made by the Park Department in the improvement of the grounds, see page 67.)

- J. W. CODY & Co.,
Excavating.
- W. S. TYLER WIRE WORKS Co. (Cleveland, Ohio),
Bear Dens, Wolf Dens, Fox Dens, Flying Cage.
- PAGE WOVEN WIRE FENCE Co. (Adrian, Mich.),
Iron fences for Beaver Pond, Prairie Dog Village, Otter Pool, Crocodile Pool.
- A. ALLGOEVER,
Iron fence for Ducks' Aviary, side cages in Bird House, Burrowing Rodents.
- WILLIAM WILSON,
Elk House, Buffalo House, seven Shelter Houses for Deer, Ducks, etc.
- ATLANTIC TERRA COTTA Co.,
Terra Cotta for Reptile House and Bird House.
- M. F. WESTERGREN,
Roof of Reptile House, Bird House, metal cases Reptile House, etc.
- DOWD & MASLEN,
Brickwork of Reptile House, Bird House, Bear Pools, etc.
- B. A. & G. N. WILLIAMS,
Cut limestone for Reptile House and Bird House.
- THE ARMSTRONG-BOLTON COMPANY,
Hot-water heating in Reptile House and Bird House.
- THOMAS W. WEATHERED'S SONS,
Small Mammals' House.
- BATAVIA & N. Y. WOODWORKING COMPANY,
Trim and wall cases of Reptile House.
- ESTEY WIRE WORKS COMPANY,
Outside cages of Bird House, and central cage.
- J. B. & J. M. CORNELL,
Steel beams and girders, Reptile House and Bird House.
- TOSTEVIN HAYS FIRE PROOF CONSTRUCTION COMPANY,
Floors, Reptile House and Bird House.
- E. P. ROBERTS,
Granite work on buildings, and Bear, Wolf, and Fox Dens.
- BARR, THAW & FRASER,
Limestone for Bird House.
- P. MANCINELLI,
Rubble masonry.
- WILLIAM DUDLEY,
Metal railings.
- THOMAS MCKAY,
Extra wrought-iron work at Bear Dens.

MISCELLANEOUS WORK.

Notwithstanding the fact that as much work as possible was given out on contracts, there remained innumerable items of construction and general labor which it seemed advisable should be performed by the Society's own workmen. At the outset it was decided that for the concrete work to be done in connection with the numerous dens, cages, and wrought-iron fences, the most satisfactory results could be obtained, with the least expenditure, by purchasing all materials and having the work performed by day-labor under competent superintendence. This plan has been followed throughout the year, and all concrete work in the Park, save the floors of the Reptile House and Bird House, is the work of our own force of concrete workers, which was kept busily employed from the opening of spring until very nearly the end of the year.

Our own force of masons constructed the five series of sleeping dens for the bears, and for the sea lions in the Crocodile Pool, the foundation walls of the Buffalo House, and seven shelter houses for deer, antelopes, etc. The Society's carpenters erected the temporary storehouse, tool-house, stable, cook-house, storage sheds, yards for animals, floors and cages in the Small Mammals' House, and performed a great number of additional tasks. All the painting of wrought-iron work, wire work, shelter houses and cages, and the plumbing of the Reptile House and Bird House was done by our own force. With the completion of the past year's work, the pay-roll of the construction force was reduced from a maximum of 83 men earning \$3,600.94 per month, as in the month of August, to 12 men earning \$401.50 per month, as at present.

PURCHASE OF MATERIALS.

Those who purchased materials and general supplies for the Society did so as carefully as if they had been purchasing for themselves. All important purchases were made of the lowest bidder, and by making prompt payment the Society has been able to purchase at the lowest prices and secure the largest discounts. All purchases were made by written orders, based on formal requisitions, duly inspected and approved. Through this system strict economy was secured and all misunderstandings and disputes were avoided.

The entire history of a purchase, and payment therefor, is as follows:

1. Requisition from staff officer to Director.
2. Inspection and approval of requisition, and designation of proper fund to bear the expense.
3. Issue by Chief Clerk of official "order for supplies."
4. Delivery of goods at storehouse, with list, checked by Storekeeper.
5. Delivery of list by Storekeeper, signed by him.
6. Inspection and approval of goods by the requisitioner.
7. Delivery of goods to person for whom ordered.
8. Delivery of bill to Chief Clerk, duly checked and approved as to "goods and prices," by requisitioner.
9. Examination, amendment or approval of bill by Director.
10. Examination, amendment or approval of bill by Chairman of Executive Committee.
11. Issue of order on Treasurer by Chairman of Executive Committee.
12. Payment of bill by Treasurer.
13. Filing of receipted bill in its proper file, in Chief Clerk's office.

The Executive Committee has enabled the Director to establish a business system which, while affording the utmost celerity in making necessary purchases, and also providing a reasonable number of safeguards, yet is in no way cumbersome nor overburdened with "red tape." Ordinarily, bills are paid by the Treasurer within ten days from their receipt at the Park office in satisfactory form.

RULES AND REGULATIONS.

By no means the least of the Director's duties during the past year was the drafting of two sets of "Rules and Regulations for the Zoological Park," one relating to the public, the other to the employees. Inasmuch as the New York Zoological Park is, in an administrative sense, quite different from all other of the institutions of its class, there were comparatively few precedents which could be followed, and its status had to be created, practically *de novo*. It was, perhaps, a fortunate circumstance that the opening day came near the end of the annual season of good

weather, and that the administrative machinery of the Park could be tested during the winter, when visitors were fewest.

Judging from five months' practical operation, there is reason to believe that, with adequate appropriations, the system now well established will yield reasonably good results, even under the severe test of midsummer throngs of visitors.

ADMINISTRATION.

The complex and diversified character of the Society's work in the Zoological Park, both in construction and in the care of collections of living animals, rendered the formation of its working force a task of unusual difficulty and perplexity. The first portion of this task consisted in assembling a force of nearly one hundred men for duty as mechanics of various kinds, and laborers. All these men, being engaged upon construction work, were necessarily considered temporary employees, and, as work was finished in their various lines, they were dispensed with. For the maintenance of the Park, however, it was necessary to select most carefully a certain number of experienced and competent men to be placed in charge of the various departments into which the work would necessarily be divided, and to provide each of them with a force of competent assistants. The fact that every person placed on the maintenance force was expected to become a permanent employee rendered it necessary to exercise unusual care in their selection.

At the outset of its work in the Zoological Park the Society adopted the policy of employing none but competent and reliable men, who were not addicted to the drinking habit. That portion of the Society's agreement with the City which required that all persons employed in the Zoological Park should be selected solely by reason of their special fitness and ability was, in every case, most strictly observed. So thoroughly has this principle been carried out, that not a single person now employed on the Park force owes his position to the personal influence or friendship of any member of the Executive Committee, or Board of Managers, or any other person prominently connected with the Zoological Society. The force contains not one "favorite," but every person occupying a place in it owes his position solely to his own merits and his ability to satisfactorily perform the service for which he was engaged.

To cover the service required, the Zoological Park force has been divided into various departments, and the following diagram shows the subdivisions, with the name of the officer in charge of each:

ADMINISTRATION OF THE ZOOLOGICAL PARK.

Departments.

DIRECTOR. 1 Stenographer. 1 Messenger.	ACCOUNTS, RECEIPTS, and DIS- BURSEMENTS. Chief Clerk, H. R. Mitchell.	{ 3 Gatekeepers. 3 Watchmen. 4 Check Boys. 1 Storekeeper.
	MAMMALS. Asst. Curator, J. Alden Loring.	{ 2 Keepers. 1 Helper. 1 Cook.
	BIRDS. Asst. Curator, C. W. Beebe.	{ 1 Keeper. 1 Helper.
	REPTILES. Asst. Curator, R. L. Ditmars.	{ 1 Keeper. 1 Asst. Keeper. 1 Janitor.
	FORESTRY, GARDENING, and PARK SERVICE. Chief Forester, H. W. Merkel.	{ 2 Asst. Foresters. 1 Hot House Man. 1 Helper. 2 Teamsters. 1 Cleaner. 7 Laborers.
	CONSTRUCTION and REPAIR. Chief Constructor, W. H. Puffer.	{ 1 Foreman. 2 Painters. 1 Plumber. 2 Carpenters. 5 Laborers.
	ENGINEERING. George M. Beerbower.	{ 1 Assistant. 2 Chainmen. 1 Laborer.

The following is a brief resumé of the most important features of the work of each department.

ACCOUNTS, RECEIPTS, AND DISBURSEMENTS.

Early in 1899 it became apparent that the labor and responsibility involved in keeping the books of account of the Society's construction operations, and of the maintenance of the Park, together with the management of the gates, the daily receipt of moneys from privileges, and a proper accounting for the same,

involved serious responsibilities. After long and careful deliberation, Mr. H. Raymond Mitchell was selected to fill the position of Chief Clerk and Disbursing Officer, and he assumed the duties of the position on May 23, 1899.

Having had several years' experience in railroad work as chief clerk, cashier, and agent, Mr. Mitchell is particularly well fitted to perform the very exacting duties of his position. He has assumed full responsibility for the handling of all cash coming into his hands, and has furnished a satisfactory bond. His first work consisted in opening two sets of books of account, one for the Park Improvement Fund, and one for the Maintenance Fund, which show in detail every receipt and disbursement. He renders a monthly financial statement to the Executive Committee, and at the end of each year an annual statement. He prepares all pay-rolls, receives from the Treasurer the funds for their payment, and pays our employees in currency instead of checks, which is much more satisfactory to them. The force of men employed on the gates in selling and receiving tickets, checking bicycles, selling guide-books, etc., are entirely under Mr. Mitchell's direction; and the receipts from all privileges are paid to him and duly accounted for. For the safe-keeping of the numerous files of vouchers for payments made from the Park Improvement and Maintenance Funds, and of the cash receipts, a fireproof safe has been provided.

Notwithstanding the complicated nature of the work involved in keeping the various funds of the Park in separate accounts and maintaining sharply the line of division between the expenditures of the Society and those made by the City on account of maintenance, the status of every item of expenditure, even down to the smallest, is sharply defined, and charged in its proper place in the account to which it belongs. The Chief Clerk's books of account, vouchers, requisitions, and orders for supplies are all in admirable condition. An account is kept with each feature of the Society's installations for animals, so that at any time the cost of each can be accurately ascertained.

SELECTION OF ANIMALS.

In order that the animals exhibited in the Zoological Park may be worthy representatives of the species they illustrate, great care is exercised in their selection. Not only are imperfect specimens excluded, but also, as far as possible, all that have been bred and reared in close confinement. The finest animals are those born in a wild state, or else in a game preserve so large that captivity has not necessarily resulted in degeneracy. With the exception of a very few specimens, all the animals in the Zoological Park were caught wild, when young, and reared in confinement, a process which produces the best possible results in the stocking of a vivarium. Usually it is impossible to capture adult animals of the larger types and induce them to become cheerfully resigned to captivity. In most cases they either kill themselves by struggling or die of melancholy.

The Society does not propose to send out any expeditions to collect specimens, for the reason that this method is too expensive. Our supply of animals must necessarily come from local collectors, dealers, and the owners of large game preserves.

MAMMALS.

The Society's promise to devote early attention to the formation of collections of our most interesting American mammals has thus far been faithfully carried out. In spite of all temptations to accept animals before we were ready for them, the Society adhered to its original policy—to form no collections until actually in possession of the grounds, and within measurable distance of the opening day. Last May, however, the opening of the Park in 1899 seemed reasonably certain, and accordingly the business of gathering collections began.

After a prolonged search for a satisfactory caretaker for quadrupeds, the choice of a man for that position fell upon Mr. J. Alden Loring, who received the title of Assistant Curator, in charge of Mammals. Mr. Loring came to the Zoological Park well recommended by Dr. C. Hart Merriam, Chief of the Biological Survey, of Washington, in whose service he had spent eight years as a field naturalist, working on mammals. During this period, Mr. Loring's observations upon the home-life and



LIBERATING THE FIRST LARGE MAMMAL.

(Woodland Caribou, from Canada.)



WINTER ON THE BUFFALO RANGE.





food habits of our North American mammals yielded to him a fund of information of great value in connection with the care of animals in captivity. In addition to this experience, he came to the Zoological Park fresh from several months' practical training in the Gardens of the Zoological Society of London, where, by the courtesy of Dr. P. L. Sclater, he was permitted to work with the keepers in the various departments of the Gardens while he studied their methods in the care of the twenty-five hundred animals forming that splendid series of collections. In addition to this, he also visited several of the finest zoological gardens of the Continent.

Living animals began to arrive at the Zoological Park on May 11th, and Curator Loring reported for duty on the following day. Inasmuch as none of the permanent installations for animals were then ready for occupancy, it became necessary to provide temporary quarters for mammals, birds, and reptiles of all kinds. At the north end of the storehouse building a yard for animals was made by enclosing with a tight board fence a dry, open space on the hilltop, and providing suitable interior sheds. Temporary cages and enclosures of wire netting were provided, and almost as rapidly as completed they were filled with birds and quadrupeds. The arrival of a large shipment from Florida necessitated the extension of the yard, and the hurried preparation of two small cemented pools for the brown pelicans and other water-birds, and for the alligators. A small temporary cook-house was erected, a man was engaged to serve both as cook and butcher, and the work of caring for a large mixed collection of living creatures was seriously entered upon. Within a short time the two animal yards were filled to overflowing with large water-birds, alligators, snakes in glass-fronted boxes, lynxes, foxes, raccoons, bears, monkeys, squirrels, young antelopes, etc.

During the entire summer all the birds, as well as the mammals, were in Mr. Loring's charge, and in spite of numerous and perplexing difficulties they were very successfully cared for.

The first large ruminant to arrive at the Park was a yearling caribou, which came from Champlain County, Canada. Pending the completion of the caribou shelter house, this animal was temporarily installed in the moose range. This specimen was quickly followed by three elk—male, female, and young—presented to the Zoological Park by the Brooklyn Park Department, through

Commissioner George V. Brower and Landscape Architect De Wolf. These fine animals were immediately placed in the elk range, where they were soon joined by seven more elk, presented by Mr. George J. Gould, making a very fine herd, consisting of two large old males, two young males, and females of various ages.

Following closely upon the completion of the Buffalo House and corrals was the arrival from Texas and Oklahoma of seven buffaloes; selected and purchased for the Society by Mr. C. J. Jones, and by him delivered at the Zoological Park. These animals represent two strains of blood, and form a very satisfactory nucleus for what it is intended shall be a herd of about twenty individuals.

After much correspondence, and the placing of several orders, six young prong-horned antelopes were procured and safely transported to the Park. They were all quite small, and generally delicate. Being fully aware of the difficulty of acclimating these animals on the Atlantic seaboard, they received the most unremitting care. In spite of all efforts, however, illnesses in the little herd were frequent, and, one by one, four out of the six animals have died, usually without any premonitory symptoms. The difficulty of rearing antelopes in captivity, even in the portions of the West where the animals run wild, are so well known that, while these deaths have occasioned much regret, they have caused no surprise. At present, the two remaining specimens are in excellent condition, and it is hoped they will survive and become physically adjusted to this climate. The Society intends to persist in its efforts to establish in the Park a representative herd of prong-horned antelopes, and if possible induce the species to breed.

The accumulation of small mammals from the tropics rendered it imperatively necessary to provide for them a shelter building which could be heated in winter. To this end, the construction of a glass house was determined upon, and during the months of September and October a building 25 x 75 feet was erected near the Burrowing Rodents' quarters. The construction of the cage work occupied two months longer, and this building was finally opened to the public on January 24th with all of its cages filled. It contains cages for small mammals of various sizes, and the abundance of light and ventilation leads to the belief that the building will be found admirably adapted for the display of small mammals, both summer and winter. In this building are housed

the three orang-utans, all the monkeys, all the lynxes, and various smaller species.

On January 1st the mammal collections of the Zoological Park were made up as follows:

	Species.	Specimens.
Primates	6	10
Carnivora	21	43
Ungulata	9	28
Rodentia	6	65
Edentata	1	1
Marsupialia	1	4
Total.....	44	151

The Society has received, by purchase, three caribou from northern Newfoundland; by gift, from Mr. William Rockefeller, four fallow deer and two red deer; and from the Duke of Bedford, two sambar deer and one equine deer. It is our intention to fill up the ranges as rapidly as possible with the large ungulates for which they were designed, until each range contains as large a herd as it will properly accommodate.

The four Bear Dens, completed in October, were filled immediately thereafter. The special installation for the polar bears has not yet been constructed, and these fine animals are now kept in one of the ordinary bear enclosures, which is very inadequate for their needs. The small bathing tank, which is sufficient for other bears, is entirely too small for polar bears, and it is imperative that another enclosure, with a spacious swimming pool, be constructed without delay. The polar bears are fine and showy animals, and should have a swimming pool suitable to their very interesting aquatic habits.

BIRDS.

After much deliberation, the choice of an ornithologist to take charge of the bird collections of the Zoological Park fell upon Mr. C. William Beebe, who entered the service of the Society on October 16, 1899. For several years Mr. Beebe has been a close student of the classification, structure, and food habits of birds, and, by reason of his combined knowledge of systematic ornithol-

ogy and of bird life in the field, he is specially qualified for the duties of the position to which he was appointed.

Through arrangements perfected by the Director during a vacation trip to Florida in February, 1899, Mr. C. F. Latham collected for the Society in the heronries on the headwaters of the St. Johns River a considerable number of young specimens of herons, egrets, ibises, brown pelicans, and other large water-birds. He also purchased for the Society the entire collection of birds, quadrupeds, and reptiles owned by the estate of the late Dr. John Vedder, of St. Augustine, and in July arrived at the Zoological Park with about two hundred living specimens. He also brought an important collection of sub-tropical plants for display in the conservatory attached to the Reptile House. Through this means, and through purchases, the Society acquired a collection of water-birds and birds of prey sufficient to completely fill all the cages in and around the Aquatic Birds' House, and to make a very respectable showing in the Ducks' Aviary.

The large central cage in the Bird House has proven a success beyond all expectations. A few days before the formal opening of the Park it was occupied by a mixed collection of flamingoes, pelicans, white swans, black swans, wild geese, ducks of various species, scarlet ibis, glossy ibis, wood ibis, egrets, etc., to a total number of about fifty birds. The floor of the cage is raised eighteen inches above the floor of the building, and in its centre is a large pool of running water, provided with a central fountain. The success of this exhibit in a great measure depends upon the harmony of its members, and a bird which proves to be of a quarrelsome nature is not permitted in the group. The result of the association of a number of species in this spacious enclosure is quickly noticeable in the condition of the birds. They are remarkably healthy and active, and the mortality in this group has been very low. Indeed, so beneficial are the conditions of this miniature flying cage that when water-birds quartered elsewhere begin to show signs of illness or lack of appetite they are immediately transferred to the flying cage, where in nearly every instance they have been benefited by the changed conditions.

The difficulties encountered in the construction of the large aquarium tank for diving birds have delayed its completion, and it was not until January 20th that it was filled with water for the first time. Even then, the filter which had been provided for its

water supply proved inadequate, and necessitated further experiment.

The birds of prey, quartered temporarily in the cages along the outer walls of the Bird House, have been maintained in good condition, but the eagles and condors are perceptibly crowded. It is to be hoped that the eagles and vultures' aviary, or at least an important section of it, may be constructed soon, and thereby furnish the birds of prey with as good accommodations as have been provided for the water-birds.

The full stocking of the Ducks' Aviary was purposely delayed until 1900. Nevertheless, it has contained flocks of swans, geese, and ducks representing eight species.

It has been impossible for the Society to accept gifts of perching birds, pheasants, and cranes which have been offered, because there are no suitable accommodations for them. The absence of a pheasants' aviary is particularly regrettable because of the general interest in birds of this order and the ease with which aviaries can be stocked.

On January 1st the bird collections of the Zoological Park consisted of the following:

	Species.	Specimens.
Longipennes	1	4
Steganopodes	2	21
Anseres	10	62
Odontoglossæ	1	4
Herodiones	12	38
Paludicolæ	1	2
Gallinæ	2	13
Raptores	11	29
Psittaci	1	2
Passeres	2	10
Total.....	43	185

REPTILES AND AMPHIBIANS.

No event in connection with the opening of the Zoological Park was watched by the public with keener interest than the completion and opening of the Reptile House. The public had become ac-

quainted with the fact that, because of the general lack of facilities for studying reptiles, the Zoological Society proposed to devote early attention to animals of this class. The Society was fortunate in securing for Assistant Curator, in charge of Reptiles, Mr. Raymond L. Ditmars, a thoroughly qualified expert in the care of reptiles in captivity, and also a man well versed in reptilian classification and life history. Mr. Ditmars assumed the duties of his position on July 17, 1899, and, in addition to caring for the reptiles then in the Park, he at once began to take measures for the increase of the collection, and presented to the Society his own private collection of living serpents, consisting of forty-five specimens, representing fifteen species.

Pending the completion of the Reptile House, all the reptilian collections were temporarily provided for in the animal yard, which has previously been mentioned. One very difficult feature in connection with the collections of this department is the food supply, and the ingenuity of the Curator and his assistants has been taxed to the utmost to supply the great variety of food which the capricious appetites of captive reptiles demand.

From the outset a fair share of attention had been bestowed upon the formation of collections for this building, and the degree of progress that had been made by the opening day seemed acceptable to the public. The venomous serpents of North America were particularly well represented. A special effort was made to show as many as possible of the batrachians, which resulted in the exhibition of thirteen species. A good collection of turtles and terrapins filled the central pools and sand-banks which had been provided for them, and the alligator pool contained seven alligators, varying in length from six to twelve feet. The largest individual alligator was obtained for the Society in Cocoa, Florida, and brought up with the two carloads of specimens received from that State.

Two very fine reticulated pythons were secured by purchase in New York City, but, owing to the unexpected cold wave which visited the Atlantic coast in October, before the Reptile House was heated, one of these specimens died of congestion of the lungs. The other survived, and is still in good condition. Purchases of reptiles have been made from time to time, as opportunity offered.

On January 1st the reptilian collections of the Zoological Park consisted of the following:

	Species.	Specimens.
Crocodylia	1	18
Chelonia	22	85
Lacertilia	12	65
Ophidia, venomous	11	51
" non-venomous	33	186
Amphibia	13	40
	<hr/>	<hr/>
Total.....	92	445

Summary of Live Animals on hand January 1, 1900.

	Species.	Specimens.
Mammals	44	151
Birds	43	185
Reptiles	92	445
	<hr/>	<hr/>
Total.....	179	781

FORESTRY, GARDENING, AND PARK SERVICE.

The amount and variety of work performed during the year by Chief Forester Hermann W. Merkel and his force was very great. Under the spur of imperative necessity, and to meet the demands of each week, a large force of laborers, skilled and unskilled, was placed at Mr. Merkel's disposal, and by him kept very busily engaged until the exhaustion of the maintenance fund rendered it necessary to dispense with twenty-three men out of thirty.

To many of those who visited the Park during the working season of 1899, and observed the chaos which then prevailed, it seemed impossible that it could be reduced to order before the opening day. The amount of work required to smooth up the grounds after the various kinds of contract-work had been completed was really enormous; and, unfortunately, this work was of such a peculiar nature, and the requirement for the exercise of artistic taste and expert judgment was so constant, it was impossible for it to be specified and performed by contract. In the matter of road and walk making, the contractor's duties extended

only two feet beyond his macadam work, and the regulating, grading, and seeding necessary to join the park surface to the walks was work which could be performed satisfactorily only by the Chief Forester and his men.

For similar reasons, the work of finishing the borders of all ponds devolved upon this department, and in connection with the Aquatic Mammals' Pond and Ducks' Aviary required a great amount of labor. For example, it was found necessary to cover practically the entire bottom and borders of the former with broken rock and gravel six inches in depth. Several hundred loads of rock were donated for this purpose by the Zoological Society from the excavation made for the Antelope House; and, by permission of Park Commissioner Moebus, about one hundred loads of gravel were hauled from a deposit in Mosholu Parkway and spread upon the banks.

The following is a brief summary of the principal work performed by Mr. Merkel's department during the year:

About 900 forest trees were pruned, and cavities filled in about 80. About 200 dead, dangerous, and unsightly trees were removed, sawn into cordwood, and piled up.

A nursery was established in the northeastern corner of the Park.

A road was opened from Boston Road to the nursery.

About 20,000 trees, shrubs, vines, and perennials were collected and propagated.

The whole of the Ducks' Aviary was surfaced and seeded.

The whole of the Aquatic Mammals' Pond was dressed down to a finish, surfaced with six inches of broken stone and gravel, and borders fertilized and seeded.

About 160,000 square feet of walk borders were regulated, graded, and seeded.

About 2,000 feet of service road border were regulated, graded, and seeded.

About 700 feet of old roads, through animal ranges, were obliterated and seeded.

About 2,900 feet of posts and guard-wire were erected along walk borders.

The Crocodile Pool and 51 reptile cases in Reptile House were decorated with plants, and constantly maintained.

About 1,000 cabbages, 2,000 ears of corn, 1,500 pounds mangel wurtzels, 1,000 heads of lettuce, and 20 barrels turnips were raised in the nursery for animal food.

Maintained all walks and roads, and daily service of carts and cleaners for the entire Park.

The Director desires to call special attention to the practical difficulties involved in selecting and maintaining living plants in glass cases containing reptiles, and also in the main halls of such buildings as the Reptile House, Bird House, and Small Mammals' House, when the great accumulations of sand and dust from the feet of visitors render the care of living plants a continuous struggle. The fifty-one cases in the Reptile House abundantly attest both the botanical knowledge and the artistic taste of Mr. Merkel, who, in spite of many difficulties, has so successfully collected, arranged, and maintained the plant life they contain.

In view of the very important and even imperative duties now devolving upon the Society in the preservation of the forests of the Zoological Park, in doing the planting that is absolutely necessary, and in maintaining these 261 acres of park lands in a condition which will be satisfactory to the people of Greater New York, the special appropriation of \$10,000, which was asked for last year, is very seriously needed. The amount is not one dollar more than is necessary, and it is earnestly hoped that for 1901 it will be granted.

CONSTRUCTION.

During the year 1899 the position of Chief Constructor was filled most acceptably by Mr. W. H. Puffer. We cannot speak too highly of the ability displayed by Mr. Puffer in the discharge of the very complex and exacting duties which devolved upon him, and the diligence with which he pushed forward the Society's work. It was his duty to see that all contracts in connection with the Society's buildings were carried out faithfully and promptly, and also that the force of day laborers and mechanics at work under his direction met all expectations regarding them. A very important part of his duties consisted in securing bids on such materials as were used in the construction work carried on by our own force. In many instances, special features of construction were carried out by Mr. Puffer's force at considerably less cost than the lowest bid of contractors.

Several special features in masonry were constructed by our own masons, for the reason that satisfactory results could not be secured by contract work. Of this class the leading example is the series of sleeping dens for the bears. They were built against a ledge of bare granite rock, and faced with weathered blocks of granite, so carefully selected and so skilfully joined together, that at a trifling distance the sleeping dens appear to be a part of the natural ledge. The sleeping den of the Russian wolf is generally considered by visitors to have been dug out of a huge boulder of solid granite.

Owing to the complicated nature of the plumbing required for the Reptile House and Bird House, the whole of it was put in by our own force.

In this connection it is worthy of note that while nearly thirty-one contractors were engaged during the past year in the execution of orders for the Zoological Society, often upon work which required additions and alterations in course of construction, the Society's relations with all have been entirely harmonious. Not a single serious difference of opinion has arisen, nor one requiring the services of a referee. In view of the complex nature of many portions of our work this result is well worthy of mention.

ENGINEERING.

Throughout the year, Mr. George M. Beerbower has continued to serve the Society most acceptably as its civil engineer, and has been obliged to work with great diligence to meet the multitude of demands made upon him. He has staked out the lines of every building, aviary, den, range, corral, Park boundary, walk, and road, and he also has erected the batter-boards for each of seventeen buildings that have up to this date been erected in the Park. All the maps produced during the year were drawn by him, as also were numerous working drawings for wrought-iron work.

GROUND IMPROVEMENTS BY THE PARK DEPARTMENT.

In 1898-99 the Board of Estimate placed at the disposal of the Park Department for the Borough of the Bronx the sum of \$125,000 to be expended in preparing the grounds of South Bronx Park for use as a Zoological Park. Aside from the making of Park roads, this appears to have been the first appropriation ever



THE BEAR DENS ON APRIL 17, 1899.



ERECTING IRON-WORK IN THE BEAR DENS.



made for the improvement of one of the great northern parks of this city in a manner calculated to promote its utilization by pedestrians.

The amount of work accomplished during 1899 at the expense of this fund was very considerable, and the opinion has been freely expressed by citizens in no way connected with the work, save as taxpayers, that it is to be doubted whether the City has ever secured more results for the money expended than it obtained in this Park during the year 1899.

As has previously been stated, all the improvements made were in harmony with the general scheme of development proposed in 1897 by the Zoological Society. The general plans and specifications furnished by the Society were elaborated by Chief Engineer Daniel Ulrich into detailed plans and specifications, and various contracts were let by the Park Department to the lowest bidders. Assistant Engineer John P. Schermerhorn and a field party were specially detailed to take charge of the work in progress, and it required very nearly his undivided attention. It was the duty of the Director of the Park to explain and interpret to the Engineers the general scheme of the Society, in order that the work performed by the City might exactly fit together with that of the Society, and that both might harmonize with the natural surface and other natural features of the Park.

From the very beginning all parties concerned have labored most earnestly to fit the general plan to the grounds, and not to make the grounds conform to the plan. The exact lines and grades of every walk and road, and the lines of every enclosure for animals, were determined upon the ground, not in an office. The 12,000 lineal feet of walks and roads have been carefully fitted to the natural contours of the Park, *and the construction of the entire system completed thus far has not cost the life of even one valuable tree!*

The task of providing this very uneven tract of forest and meadow-land with walks, water, sewers, buildings, dens, aviaries, and ponds, all of which shall serve their functions and yet maintain the harmony of Nature, is to-day, and from the beginning has been, a difficult one. It is both a duty and a pleasure to record the fact that Park Commissioner Moebus and his engineers have, in every possible manner, and on all occasions, labored most earnestly in co-operation with the Society to secure for the public

the best possible results with a minimum of expenditure, and in the shortest time consistent with good work.

Up to the close of 1899 the work of the Park Department in the preparation of the grounds of the Zoological Park consisted of the following items:

AQUATIC MAMMALS' POND.

The first work of the City in the Zoological Park was the excavation of the Aquatic Mammals' Pond, which was performed in the year 1898. The rough excavation had been almost completed by the time the winter put an end to all further operations. Owing to the soft, spongy nature of the material to be removed, the difficulties encountered in making the excavation were great. The cost of the original excavation was over \$4,000, but, aside from the value of the Pond, the supply of rich, black soil obtained has been estimated by experts to be worth the entire sum expended in removing it. As stated above, the sides and bottom of this Pond were finished by a force from the Forestry and Gardening department, working under the personal direction of Mr. Merkel.

This Pond, as completed, is highly satisfactory, and serves a number of important practical purposes, not the least of which is the continuous supply of pure ice it will yield for the Park.

SERVICE ROAD AND MOTOR-CARRIAGE ROAD.

No other feature of the ground improvements has afforded such general relief to the Park administration as the Service Road. Prior to its completion there was a constant struggle with teamsters to keep them from ruining the southern portion of the Park. This road enters the grounds from the Southern Boulevard, between the Elk and Moose ranges, touches the Wolf Dens and Storehouse, passes close behind the Reptile House, taps the Bear Dens by a short spur, and sweeps around Rocking Stone Hill to the Buffalo House and Public Comfort Building. It is built of Telford macadam, covered with trap-rock screenings, and is 3,000 feet in length. As a matter of course, it has been constructed to fit the contours of the ground over which it passes. Besides providing for the service of nearly the entire southern portion of the Park, this road will presently form the middle half of the Motor-

Carriage Concourse, which has been designed for vehicles to carry visitors to various points in the area devoted to collections. An extension eastward of about 900 feet will carry the line to the Boston Road, and an extension 1,400 feet northward will reach the proposed terminus of the line at the carriage entrance on Pelham Avenue.

GRAVEL WALKS.

On account of the numerous fillings required in constructing the walks made last year it was deemed inadvisable to surface them with asphalt until their foundations had settled as much as they ever will. It was therefore decided that for the first year, at least, the walks should all be finished as gravel walks, which was done. Between March 1st and November 1st, Mr. William Masterson constructed, under the terms of his contract, 9,750 lineal feet of gravel walks, varying in width from 10 to 20 feet, with a total surface of about 140,000 square feet. From each of three entrances a main walk 20 feet wide leads into the grounds, until it divides; and nearly all other walks are 12 feet in width. The system completed last year carries the visitor through the Park diagonally from southeast to northwest, branching off midway to the southwest entrance, and reaches all of the twenty-six buildings and other enclosures which contain animals. During future years this system will be extended to the Northeast Entrance, Baird Court, the Carriage Entrance, and, in fact, all other portions of the grounds, on the lines laid down in the Final Plan.

WATER LINES.

By dint of great effort, both on the part of the Park Department and the Zoological Park force, water-pipes were laid not only to the large buildings, dens, and aviaries, but also to every range for animals. The two mains which have been laid into the grounds from the Southern Boulevard are large enough to provide adequate protection from fire, but a very moderate fraction of their capacity is sufficient for the ordinary needs of the Park. Strict injunctions against unnecessary use of water have been laid upon the Park officers.

The total length of water-pipe of all sizes laid in the grounds last year was 6,110 feet, the greatest amount being of 1½-inch

and 2-inch galvanized pipe, leading to the ranges for large game and the Bear Dens. Thus far no water-pipes have been laid in Baird Court, for obvious reasons, but the present 6-inch main terminates within a few feet of the Lion House and Bird House.

SEWERS.

The first sewer constructed in the Zoological Park was that in Birds' Valley, 1,200 feet in length, to receive the sewer stream flowing into the Park from Belmont. This was constructed by the Sewer Department, at a cost of \$2,250, which sum was specially appropriated in 1898. All the sewers connected with the Bear Dens were constructed by the Zoological Society. Mr. Masterson constructed, under his general contract, a main sewer from the Crocodile Pool and Reptile House on the east, and the Otters' Pool on the south, to a point in the brook northeast of the Wolf Dens. In Birds' Valley a lateral was built to the Birds' House, and many shorter lines were laid. Including the Birds' Valley sewer, the total length of sewers and drains constructed in the Park up to date is 4,775 feet.

NEW DAM AT WATERFALL.

During the summer of 1899 the water in Lake Agassiz began to break through the old stone wall which abuts against the northern end of the rock ledge which forms the waterfall in the Bronx River. By degrees this wall was washed away, until Lake Agassiz was quite emptied of water. The malarious exhalations from the mud-flats that were exposed became a public menace to health, and created a condition which demanded immediate improvement. Park Commissioner Moebus immediately ordered construction work, which resulted in the rebuilding of the broken wall and in replacing the decayed wooden timbers on top of the rock ledge with a coping of solid concrete, laid in curves conforming to the natural lines of the ledge. By this means, the water in Lake Agassiz was again raised to its original level, and the nuisance was abated. While this work was in progress the Director employed a special force of men in cleaning out the channel around the island near the southern shore, in order that a current might flow around it and abate the condition of unwholesome stagna-



THE ROAD-MAKERS.



BUILDING CONCRETE COPING AT WATERFALL.



tion that had previously existed at that point. This end was successfully accomplished, and one more malarious influence has thereby been eliminated from that region.

FENCES FOR PARK BOUNDARY AND RANGES FOR ANIMALS.

In April, 1899, a contract for wire fencing on steel posts was let to the Page Woven Wire Fence Co., and on July 1st that company completed the erection of 27,855 feet of elastic steel-wire fence, on heavy steel posts, a large number of which were set in concrete. This contract enclosed all of the Zoological Park which lies west of the Boston Road and south of Lake Agassiz with a fence 7 feet 4 inches high, made of 25 wires of hardened steel, each having a tensile strength of between 4,000 and 4,500 pounds. The end and corner posts are made of plate steel, the heaviest ever made for wire fences, and are set four feet deep, in a mass of solid concrete two feet in diameter. The same kind of fence encloses each of the ranges for buffalo, antelope, deer of various kinds, moose, and caribou. At a little distance, say 200 feet, the wire of these fences very often is absolutely invisible. The entire work of erecting these fences and gates and connecting them with buildings has been done in a most painstaking and skilful manner, and they constitute a valuable object-lesson for other cities wherein zoological gardens are to be established.

TOILET COTTAGES.

For temporary use, until a regular outlet for sewage has been secured via West Farms, four small toilet cottages, of wood, were erected last October by T. W. Timpson & Co., and completed before the Park was formally opened to the public.

ENTRANCE PAVILIONS.

A contract for the construction of four entrance pavilions, with rooms for gatekeepers, self-registering turnstiles, etc., was let to John R. Sheehan; but, while work upon them was well advanced by the end of 1899, they are not yet ready for use. These pavilions are situated at the extreme corners of the enclosed area of the Park, with the exception that the one nearest to West

Farms is situated at the northeastern corner of the Buffalo Range. Pending the completion and acceptance of these pavilions, the Zoological Society has provided temporary sentry-boxes for the gatekeepers.

PUBLIC COMFORT BUILDING.

On November 2, 1899, a contract was let to T. W. Timpson & Co. for the erection of a public comfort building, quite near the Rocking Stone. In addition to spacious toilet-rooms, it will contain an interior dining-room for the serving of cooked meals, and extensive lunch-counters in the two pavilion wings. This structure will be greatly needed as soon as spring opens, and it should be completed by June 1, 1900.

GRADING OF BAIRD COURT.

A very important contract was let on September 7, 1899, to John C. Rogers, Jr., for \$20,756, for the grading of Baird Court, the erection of stone retaining-walls along both sides, all in accordance with an amendment to the original plan, adopted by the Executive Committee on July 12th, filed on that date with the Park Department, and officially approved by it. This work is a necessary preliminary to the erection of the large animal buildings that are to be located in that open space. On October 16th, Mr. Rogers began work with a large force of men and machinery, and by the end of the year had very nearly completed the task. One feature of this work is the excavation and concreting of a pool for sea lions, situated in the centre of the Court, which will be ready for use early in the coming spring.

EXCAVATION OF COPE LAKE AND ELK POND.

Both these features are included in the contract with J. C. Rogers, Jr., mentioned above. The Elk Pond excavation was completed in October. Work on Cope Lake has been in almost constant progress for several months, and will be completed early in the spring. The Society will then take up promptly the work of finishing and seeding the banks of both these lakes, and confidently expects to have them in satisfactory condition by the time the mild weather of May brings the usual throng of visitors.

BENCHES.

Two hundred park benches have been contracted for by the Park Department, and are almost ready for delivery. These will be distributed generally throughout the Zoological Park grounds in shady situations, where they will be most useful to visitors. Quite a number will be placed in the pleasure grounds bordering the river.

STATEMENT OF GROUND IMPROVEMENT CONTRACTS AND GENERAL
WORK PERFORMED AND IN PROGRESS UNDER THE DIRECTION
OF PARK COMMISSIONER MOEBUS.

Completed Ground Improvements to January 1, 1900.

Fences for Ranges, Corrals, and Boundary, $5\frac{1}{4}$ miles, Page Woven Wire Fence Co.....	\$10,571 84	
9,750 lineal feet of gravel walks		} William Masterson's Contract.....
6,110 " " " water pipe		
4,775 " " " sewers		
3,000 " " " service road		
22 flights of stone steps, man-holes, street washers, etc.		30,970 48
Excavating Aquatic Mammals' Pond up to Nov. 24, 1898 :		
New Dam at waterfall, and other labor.....	\$8,061 17	
Four toilet cottages	1,400 00	
Engineering expenses.....	4,872 23	
Miscellaneous bills and supplies.....	1,233 54	
		\$57,109 26

Under Contract with Ground Improvement Fund.

Four Entrance Pavilions	\$8,600 00	
Grading of Baird Court		} John C. Rogers' Contract.....
Erection of retaining walls		
Excavation of Cope Lake		
Excavation of Elk Pond		20,756 00
Public Comfort Building No. 1	16,550 00	
200 Park benches	1,200 00	
		47,106 00
Total		\$104,215 26
Leaving an available balance of		20,784 74
Total fund appropriated.....		\$125,000 00

GRATUITOUS WORK.

At the north end of Baird Court, and extending along the entire line of the Carriage Concourse to the proposed Carriage Entrance at the Pelham Avenue Bridge, there existed a depression, from five to seven feet in depth, which required to be filled before the concourse could be constructed. At the Northwest Entrance, also, a smaller depression existed. By a very fortunate coincidence, the space which required filling was needed by Mr. J. C. Rogers as a dumping-place for stone which he was removing from a street near the Park. As a result, the delivery of several thousand cubic yards of stone and earth was secured, free of charge, where the Society most desired to have it. Several thousand dollars were saved to the City, and the final completion of the carriage concourse was advanced by nearly a year.

PRIVILEGES.

During the year 1899 the Zoological Society claimed none of the privileges existing in the Park, save that, from November 9th onward, an admission fee has been charged every Monday and Thursday at the gates to the fenced grounds. This fee is twenty-five cents for adults and fifteen cents for children under twelve years of age. During the year 1900, however, and for the future, the Society will assume the management of all the privileges available in the Park, and devote the revenue from them solely to the purchase of animals for the collections.

The first edition of the "Official Guide Book to the Park" is being sold at cost, but after the cost of the plates has been made up, its sale may possibly yield a small profit.

ATTENDANCE AND GATE RECEIPTS.

Formal opening of the Zoological Park.....	Nov. 8th
First pay day	Nov. 9th
Attendance for remainder of November, 21 days.....	57,910
Attendance for December	31,932
Received at gates during November	\$230 75
Received at gates during December	\$162 65
Greatest number of visitors in one day, Nov. 26th.....	18,300

MAINTENANCE FUND.

The following is a statement of the expenditures incurred for the maintenance of the Zoological Park during 1899. During the year reported upon, the drain upon this fund for labor which was imperatively necessary in connection with the proper care and treatment of the Park grounds, roads, walks, etc., was much greater than was expected. To offset this, the arrival of live animals and the engagement of curators and keepers was delayed as long as possible. During the year 1900 the increased expenditure necessary for services, food for animals, fuel, etc., will require at least \$5,000 per month, without providing for the planting operations that are so imperatively necessary. Aside from the care of the collections, the proper care of the grounds of the Zoological Park and the wants of the public require at all times, save in midwinter, a force of at least twenty men, constantly employed. At present this force consists of seven men only.

MAINTENANCE EXPENDITURES IN THE ZOOLOGICAL PARK.

Jan. 1, 1899. Received " for six months' maintenance " \$30,000 00

EXPENDED FROM CITY MAINTENANCE FUND.

January	\$162 30
February	215 75
March	705 87
April	1,453 18
May	3,185 58
June	5,582 77
July	3,516 42
August	4,910 58
September	4,988 00
October	4,456 17
November	823 38
	<hr/>
	\$30,000 00
Paid by the Zoological Society for maintenance, Nov. and Dec....	7,038 61
	<hr/>
	\$37,038 61

POLICE PROTECTION.

A short time prior to the opening day the Society forwarded to the Police Commissioners an application for a special detail of six policemen for permanent duty in the Zoological Park. In due course this request was referred to Inspector John H. Grant and Captain Hugh Fitzpatrick, of the 41st Precinct, for investigation and report. After a careful examination of the needs of the Park, the Society's application was favorably reported upon, and, on November 22d, Chief of Police Devery detailed eight policemen for special duty in the Zoological Park enclosure and animal buildings.

During the open hours of the day six men are constantly on duty, and two are on duty at night. On Sundays, when the crowds in the animal buildings and elsewhere are very great, Captain Fitzpatrick sends down extra men, including detectives in civilian dress, for duty during the period of greatest attendance. In the Reptile House, Bird House, and Small Mammals' House it is absolutely necessary that policemen should be present every Sunday to keep the crowds in motion and prevent congestion and discomfort. In this duty, the keepers, Park watchmen, and various other attendants regularly assist.

The Director takes pleasure in reporting that during the entire year reported upon, and in fact down to the date of publication, the Zoological Park has been very carefully looked after by Captain Fitzpatrick, and it has been well protected. While the most trying season of the year—the summer—is yet to come, there is every reason to believe that the needs of the Park are now so well understood that no great difficulty, beyond the labor inseparable from the management and care of great crowds of people, will be experienced by the representatives of the Police Department.

OPENING OF THE PARK.

Twice was the formal opening of the Zoological Park postponed in order to give contractors time to finish their work. Finally, however, on November 8th, with simple but appropriate ceremonies, consisting of an address of welcome by Professor Henry F. Osborn, Vice-President of the Society, and responses by Comptroller Bird S. Coler and Hon. August Moebus, Park Commissioner, the New York Zoological Park was declared, by Hon. Levi P. Morton, President of the Zoological Society, to be open to the public. At that time twenty-two installations for animals were ready, and they contained a total of 843 living specimens.

ACKNOWLEDGMENTS.

I cannot close this report without recording an expression of acknowledgment of the helpful sympathy which has been bestowed upon the work of the Zoological Park force, and for the universal and hearty co-operation which has made it possible to open the Park in the year 1899.

It is well that members of the Zoological Society, and the public generally, should know that the attention of the Executive Committee to the work in hand has been constant and tireless. Not only has it been given to matters of prime importance, but it has also been lavishly bestowed upon matters of detail, and there are few features of work in the Park which do not bear the visible impress of the careful suggestion, criticism, or direction of Professor Henry F. Osborn and Mr. Madison Grant. But for their devotion to the work, the Zoological Park would be much less advanced and much less perfect than it now is. The speed which has been made in the Society's special work in the Park has been due to the diligence, attention, and good business methods of the Executive Committee.

To the Park Department of this Borough belongs great credit for the energy and success with which its work has been pushed forward. Park Commissioner Moebus has at all times hastened his share of the improvement work in the Park, and done everything in his power to promote the great object in view. The money expended under his direction has been expended wisely and economically and in entire accord with the plans and desires of the Zoological Society. The Park Department Engineers in charge of the work have spared neither pains nor labor in their endeavors to secure the best results obtainable, and the Society owes much to the sincere good-will of the various officers of the Park Department.

The Society's relations with nearly all the contractors engaged in the Zoological Park have been most cordial, and nearly all have manifested a public-spirited and helpful interest in carrying out the details of the general scheme of development.

For the numberless kind acts of sympathy and helpfulness which have been bestowed upon the Director individually, he records his grateful thanks.

Respectfully submitted,

WILLIAM T. HORNADAY,

Director.

January 1, 1900.

TREASURER'S

For the Year ending

PARK IMPROVEMENT FUND: RECEIPTS.

Previous subscriptions, with interest to Dec. 31, 1898. \$105,781 02

Founders' Fees:

Cornelius Vanderbilt	\$5,000 00	
Andrew Carnegie	5,000 00	
Mrs. Antoinette Eno Wood	5,000 00	
Samuel Thorne (balance).....	4,000 00	
Helen M. Gould	5,000 00	
Emily N. Trevor (balance).....	4,000 00—	28,000 00

Associate Founders' Fees:

Edward J. Berwind	1,500 00—	1,500 00
-------------------------	-----------	----------

Patrons' Fees:

Newbold Morris	1,000 00	
Eva Van Cortlandt Morris.....	1,000 00	
Roswell P. Flower	1,000 00	
Lispenard Stewart	1,000 00	
Miss Caroline Phelps Stokes.....	1,000 00	
Joseph Stickney	1,000 00	
A. Woolf	1,000 00	
Cornelius N. Bliss	1,000 00	
Abram S. Hewitt	1,000 00	
Mrs. Carolyn F. Stickney.....	1,000 00	
Mrs. A. Newbold Morris.....	1,000 00	
Charles W. Harkness	1,000 00	
Miss Phebe Anna Thorne.....	1,000 00	
Victor C. Thorne	1,000 00	
Joel W. Thorne	1,000 00	
Edwin Thorne	1,000 00	
Samuel Thorne, Jr.....	1,000 00	
S. Brinckerhoff Thorne	1,000 00	
Hugh J. Chisholm	1,000 00	
Samuel D. Babcock (balance).....	500 00—	19,500 00

Subscriptions:

Robert S. Brewster	500 00	
James B. Ford (additional).....	500 00	
Oswald Ottendorfer (additional)	250 00	
James S. Dennis	10 00—	1,260 00

Borrowed of Atlantic Trust Co., on personal note
of Messrs. Osborn, Cadwalader, Whitehead,
Barnes, and Morton

17,000 00

Gift from The Engineers' Club, to purchase Bear.

50 00

Through W. T. Hornaday, Director:

Nov. Sales—Guide Books and photographs...	119 65	
Corrections on Pay Rolls.....	53 50	
Palm destroyed in transit	10 50—	183 65

Transferred from "General Fund":

Loan	3,000 00	
Director's salary, May and June.....	833 32—	3,833 32

Interest on Deposits:

Fifth Avenue Trust Co.....	1,559 78	
Atlantic Trust Co.....	972 47—	2,532 25

\$179,640 24

Atlantic Trust Company, 39 William Street, New York,
January 9, 1900.

STATEMENT

December 31, 1899.

PARK IMPROVEMENT FUND: EXPENDITURES.

Buildings and Animal Installations:

Elk House	\$1,915	82	
Ducks' Aviary	3,291	20	
Burrowing Rodents' Quarters	2,252	85	
Bird House	24,084	53	
Prairie Dogs' Enclosure	804	17	
Reptile House	48,037	48	
Flying Cage	5,286	35	
Beaver Pond	2,960	87	
Bear, Wolf, and Fox Dens	17,064	49	
Mountain Sheep Hill	379	55	
Crocodile Pool	1,327	41	
Buffalo House	3,614	02	
Antelope House	1,855	08	
Otters' Pool	1,225	26	
Moose Shelter	996	54	
Red Deer Shelter	1,060	19	
Small Mammals' House	4,000	04	
Caribou Shelter	1,061	70	
Antelope Shelter	1,043	66	
Fallow Deer Shelter	1,035	29	
Mule Deer Shelter	189	34	
Elk Shelter	78	16	
Virginia Deer Shelter	165	65	
Architects' Commissions	6,088	33	
General Construction	10,267	58	\$140,085 56
Maintenance, Ground Improvements, etc., for 1898:			
Ground Improvements	2,281	18	
Maintenance	1,292	16	
Storehouse	655	66	
Engineering—all purposes	2,903	74	7,132 74
Transferred to the "General Fund":			
Life memberships, Benson B. Sloan.....	600	00	
On account of payment to Architects.....	800	00	1,400 00
Guide Books and Photographs		990	67
Live Animals			8,540 72
Amounts due from City:			
Advanced for Maintenance	10,267	55	
Advanced for Improvement of Grounds.....	799	45	11,067 00
Cash shortage on account of "Maintenance," Dec. 31, 1899*.			5,045 56
Collectable from City, on account of Improvement of Grounds			40 56
Cash balance in the hands of Treasurer, Dec. 31, 1899.....			5,337 43

* Add maintenance bills for \$1,993.05, unpaid on Jan. 1, 1900,
making total net shortage on maintenance for 1900, \$7,038. 61.

\$179,640 24

L. V. F. RANDOLPH,
Treasurer.

TREASURER'S STATEMENT

FOR THE YEAR ENDING DECEMBER 31, 1899.

GENERAL FUND: RECEIPTS.		GENERAL FUND: EXPENDITURES.	
Cash balance in Treasury, Dec. 31, 1898, as per Third Annual Report	\$510 67	Office rent (69 Wall Street) for January, February, March, and April	\$100 00
Annual dues from 532 members	5,320 00	Third Annual Report	339 00
Life membership fees from 6 life members	1,200 00	Bulletin No. 3	95 37
Interest on daily balances	65 84	Maps	56 50
Transferred from "Park Improvement Fund" in reimbursement, on account of construction expenses paid from "General Fund"		Stationery, printing, and office supplies	692 97
Returned from "Petty Cash Fund" by Director	2,930 30	Director's salary for January, February, March, and April	1,666 64
	50 00	Travelling expenses	100 00
		Library	102 76
		Photographs and slides	81 77
		Furniture and fixtures, Secretary's office	82 14
		General office expenses	1,067 97
		Subscription to League of American Sportsmen, for protection of native animals	100 00
		Medical attendance on Park employees	12 00
		Transferred to "Park Improvement Fund":	
		On account of loan	\$3,000 00
		Director's salary for May and June ..	833 32—
		Miscellaneous expenses and sundries	748 30—
		Cash balance in Treasury December 31, 1899	998 07
			<u>\$10,076 81</u>
Cash received at gates, etc.		Cash in hands of Treasurer	
	\$230 75		\$230 75

Atlantic Trust Company, 39 William Street, New York,
January 9, 1900.

L. V. F. RANDOLPH,
Treasurer.

FOR THE YEAR ENDING DECEMBER 31, 1899.

MAINTENANCE: RECEIPTS.

Received from City on account of Maintenance ap-
 propriation of \$30,000, "for six months," 1899. \$19,732 45
 Balance due from City account of Maintenance... 10,267 55—\$30,000 00
 Shortage for the year 7,038 61

MAINTENANCE: EXPENDITURES.

Salaries and labor \$26,645 35
 Tools and hardware 1,474 95
 Paints 41 33
 Nursery fixtures 557 62
 Nursery stock and seeds 712 22
 Fertilizers 323 00
 Office furniture and fixtures 552 54
 Office supplies and printing 306 88
 Uniforms and badges 228 50
 Sanitation 39 70
 Insurance 46 38
 Horses and vehicles 237 24
 Repairs 81 03
 Drainage and water supply 202 21
 Roads and walks 202 09
 Kitchen utensils 69 16
 Stable and animal enclosure 739 91
 Telephone 84 65
 Landscape architecture 767 56
 Postage, telegraph, and express 362 66
 Food for animals 1,840 95
 Fences 635 26
 Ice 63 13
 Fuel 419 38
 Labels and signs 120 20
 Medical attendance for animals 20 00
 Sundries 265 22—\$37,038 61

IMPROVEMENT OF GROUNDS: RECEIPTS.

Due from City for Improvement of Grounds, bills rendered... \$799 45
 Collectable from City, bills to be rendered..... 40 56

IMPROVEMENT OF GROUNDS: EXPENDITURES.

Improvement of grounds (payable from City fund)..... \$840 01

Atlantic Trust Company, 39 William Street, New York,
 January 9, 1900.

L. V. F. RANDOLPH,
Treasurer.

OPENING OF THE ZOOLOGICAL PARK.

On Wednesday, November 8th, the New York Zoological Park reached the end of the first stage of its progress. For months previous, the pressure from visitors desiring to view all the living collections had been very great. It was decided to mark the opening day by a simple ceremony, and the public was invited more for the purpose of viewing the completed construction work in the Park than to view the collections of living animals, although some features of the latter were very creditable.

A temporary platform, suitably draped with the national colors, was erected at the north end of the Bird House, and at 3 P.M. the guests of the occasion assembled.

Hon. Levi P. Morton, President of the Society, called the meeting to order, and said:

“LADIES AND GENTLEMEN: It gives me great pleasure to introduce to you the man who has done more than any other for the establishment of this Zoological Park, Professor Henry F. Osborn.”

PROFESSOR HENRY F. OSBORN'S ADDRESS OF WELCOME.

“Fellow citizens, you are welcome to the opening of this Park, which marks another step of progress toward the great New York of the future.

“What our museums are doing for art and natural science, this Park and its fair botanical companion up the Bronx will do for Nature, by bringing its wonders and beauties within the reach of thousands and millions of all classes who cannot travel or explore. Unlike the small closed zoological gardens of Europe, this is a free Park, projected upon a scale larger than has ever been attempted before, designed in every detail for the benefit and enjoyment of the people, and as a supplement to the work of our schools and colleges. The intelligent scientific design and administration of this Park in the popular American spirit alone justifies its establishment and maintenance by the City as a new



OPENING DAY AT THE REPTILE HOUSE.



OPENING DAY AT THE BEAR DENS.



force in our educational system and as a delightful pleasure-ground.

"On this auspicious occasion, which closes three years of planning and study and one year of hard practical work, our first acknowledgments are due to mother Nature herself. A site such as this in City limits is without a parallel. Nature seems to have shaped these two hundred and sixty-one acres for the express purposes of a Zoological Park. Two hundred thousand years ago the great Ice Sheet cut its giant grooves through Bird Valley where we are standing, and through Beaver Valley yonder, on either side of the broad ridge of granite which the engineers are now levelling for the imposing buildings of Baird Court. The Ice Sheet left behind the famous "Rocking Stone" as a memorial of its visit, and there followed the forest of oak and beech, whose noble offspring are the glory of the Park. Then wandered in the Mastodon, Buffalo, the Elk, Moose, Deer, and Beaver, the Indian, and finally our Dutch and English ancestors as the enemies and exterminators of all. We have to thank the former owners of this tract that the forest was preserved. The Mastodon is beyond recall, but before long his collateral descendant, the elephant, will be here; and this afternoon, as you wander through the ranges, you will see restored to their old haunts all the other noble aborigines of Manhattan. Later we shall find a place upon the Buffalo Range for the Indian and his tepee.

"Yes, Nature has given the City this Park and has given us the motive for its treatment. Every natural beauty has been carefully protected and preserved, hardly a tree has been cut down. And when our general scheme of planting and enclosure is completed, all the animals of North America, and many of the Old World, will be seen just as they live in the woods—happier perhaps because safe from the rifle of the hunter, free from the keen struggle for existence, generously quartered and fed.

"We must acknowledge to-day the gifts of the liberal men and women of this City, who have thus far contributed about \$150,000 toward the plans, buildings, and animals, while the taxpayers, in the good judgment of the Mayor and the Board of Estimate, have contributed an equal amount toward the paths, grading, drainage, fences, and pavilions. Yet this third of a million already expended is only the beginning of an undertaking in which all citizens will take a direct interest and contribute ac-

cording to their means. The final plan is an extensive one, befitting a great city and a generous people. This will be known, not as Bronx Park, but as the *New York Zoological Park*. Only a few years hence, in the opinion of those who have watched the past growth of the City, and who realize the progress of the science of transportation, this Park will be central, surrounded by a dense population and reached by rapid transit from every direction.

"Now we must pay a tribute no less warm to the work of many too numerous to name—the various City officers and engineers, the professional and business men, the scientists of this and other cities, the architects, the artists, the sculptors, to our able and energetic director and staff—in short, to all who, with or without recompense, have felt the inspiration of this Zoological Park as an ornament to their City and country. These men have devoted months of thought and care, weeks of foreign travel and correspondence, in order to secure for New York the plan and conception of a Zoological Park worthy of the metropolis of the western hemisphere.

"Comptroller Coler, in the regretted absence of the Mayor, we desire to acknowledge to you, as the official representative of the City, the cordial and helpful support and co-operation of the Mayor and Board of Estimate, of the Park Department and its engineers, as well as of other departments of the City. We state that, although unfinished, the Zoological Park is now ready for the public. You have imposed upon us a great trust; we have fulfilled it to the best of our ability. We ask your continued confidence and support."

At the conclusion of Professor Osborn's address, the President introduced the Hon. Bird S. Coler, Comptroller of New York, who represented the Mayor, and who responded as follows:

REPLY OF HON. BIRD S. COLER.

"Mr. President, Ladies, and Gentlemen: It gives me great pleasure to participate to-day in the formal opening of the Zoological Park. These slight ceremonies mark another advance step in the metropolitan progress of our great City. The plan of public co-operation with private generosity in establishing and maintaining institutions combining artistic or scientific instruc-

tion with pleasure for the great body of our citizens seems to be now firmly established. We now have the Metropolitan Museum of Art in Central Park, the American Museum of Natural History in Manhattan Square, the great New York Public Library is now in course of construction on the site of the old Forty-second Street Reservoir; in Brooklyn there is the Museum of Arts and Sciences, and at the other end of Bronx Park there are the Botanical Gardens. The power for good which all these institutions exercise in combining instruction with healthful recreation can hardly be over-estimated. Moreover, they add inestimably to the attractiveness of our City. They are or will be show-places which attract visitors; they help to give our City the reputation it should possess among the great capitals of the world; they add to the civic pride which is at the basis of good citizenship. I will not detain you longer from participating in the pleasures which are here at hand for you, and will only add that I hope that when those pleasures shall be experienced in the future by the millions of visitors who will come to this Park there will be realized also the feeling that it is a pleasant thing—a glorious privilege, in fact—to be a New Yorker.”

President Morton then introduced Hon. August Moebus, Park Commissioner for the Borough of the Bronx, who spoke as follows:

REPLY OF HON. AUGUST MOEBUS.

“ Mr. Chairman, Ladies, and Gentlemen: It is a pleasing duty to be present upon the opening of these beautiful gardens, and to participate upon behalf of the City of New York in your formal exercises.

“ The organization of the New York Zoological Society, formed for the purposes of encouraging and advancing the study of zoology, and of furnishing instruction and recreation to the people, must strongly appeal to the intelligence of, and command the support of, every thinking citizen.

“ This great City has never been found wanting in its cordial and liberal appreciation of any enterprise that is to the interest and for the benefit of its people. It has set aside 261 acres of this grand park for the purposes of the Society. It has appropriated the sum of \$125,000 for the preparation of the grounds. It has

charged itself with the annual maintenance and care of the collections, the buildings, and the grounds.

"Both the Society and the municipality may well be congratulated that in the brief space of four years, notwithstanding all the complications and delays arising from the many conflicts of charter interpretation, that this great work has been successfully carried on to its present condition.

"You can readily see that when this great Park is fully completed, and the entire 261 acres are developed, with the many collections of animals, birds, and reptiles, its imposing structures, its varied and beautiful landscapes, we shall possess an institution of which we may well be proud.

"Since my accession to office it has been both a pleasure and a duty to aid, by every means in my power, the success of this great work. I have watched its progress day by day, and week by week; and, during my continuance in office, I shall make every effort to help this undertaking, to the end that our Empire City may possess a zoological garden that, for the purposes of instruction and recreation, will be the greatest and grandest in the civilized world."

At the close of the address of Commissioner Moebus, President Morton arose and said:

"Ladies and Gentlemen: I now take great pleasure in declaring the New York Zoological Park, and all its collections, open to the public."

The assembly then left the terrace and the platform, passed through the Bird House, up Birds' Valley to the Reptile House, Bear Dens, and Buffalo House, where it dispersed.

LIST OF GIFTS TO THE ZOOLOGICAL SOCIETY.

(Revised to April 15, 1900.)

- ADAMS, GEORGE J., New York City:
King Snake.
- ANDERSON, A. A., Palette Ranch, Big Horn Co., Wyo.:
White-Tailed Prairie Dog (2 specimens).
- ATLANTIC TERRA COTTA Co., Tottenville, Staten Island, N. Y.:
Screech Owl.
- ARGUE, JAY, Buffalo, N. Y.:
Horned Lizard (5 specimens).
- BAERMAN, F. D., Seneca Falls, N. Y.:
Bald Eagle.
- BAGG, DR. CLINTON L., New York City:
Common Skunk (2 specimens).
- BARNEY, CHARLES T., New York City:
American Moose (2 specimens).
- BEDFORD, DUKE OF, Woburn Abbey, Bedfordshire, England:
Equine Deer, Sambar Deer (2 specimens).
- BEERBOWER, GEORGE M., New York Zoological Park:
Star-Nosed Mole.
- BENJAMIN, G. L., Bay Shore, L. I., N. Y.:
Loggerhead Turtle.
- BENTON, T. B., Newark, N. J.:
Mississippi Alligator (2 specimens).
- BROCKMAN, F. R., Jersey City, N. J.:
Mississippi Alligator.
- BROOKLYN PARK DEPARTMENT, Borough of Brooklyn (*through Hon. George V. Brower and Mr. John De Wolf*):
American Elk (3 specimens), Albino Fallow Deer (2 specimens),
Collection of Plants.
- BROWN, HERBERT, Yuma, Ariz.:
Raccoon (6 specimens).
- BUFFALO PARK COMMISSIONERS, Buffalo, N. Y.:
Gray Wolf (3 specimens).
- BUNN, EDWARD, New York Zoological Park:
Collection of Plants.
- CALDWELL, CHARLES H., New York City:
Hog-Nosed Snake.

- CAMERON, SIR RODERICK, New York City:
Black Bear.
- CARLIN, W. E.:
Twenty-six Enlarged Photographs of Wild Birds and Mammals.
- CLAYTON, JOHN W., New York City:
Raccoon Cat.
- CLYDE STEAMSHIP COMPANY, New York City:
Bald Eagle.
- CORBIN, AUSTIN, New York City:
Raccoon, Virginia Deer (5 specimens), and European Wild Boar,
from Blue Mountain Forest Association.
- COSTAIN, E. A., New York Zoological Park:
Collection of Plants.
- CRIMMINS, CYRIL and CLARENCE, New York City:
Wild Cat.
- CRUICKSHANK, JAMES, New York City:
Hawk, Porcupine.
- CYPHERS INCUBATOR COMPANY, Wayland, N. Y.:
Cyphers Incubator.
- COMMISSIONERS OF LINCOLN PARK, Chicago, Ill.:
History of Lincoln Park.
- DAVIS, STEWART, Narragansett Pier, R. I.:
Opossum.
- DIENST, A. P., New York City:
Gray Fox (2 specimens).
- DITMARS, R. L., New York City:
Black Snake, Garter Snake (2 specimens), Marcy's Garter Snake,
Ribbon Snake, Swamp Garter Snake, Diamond-Back Rattlesnake
(4 specimens), Ground Rattlesnake, Copperhead Snake, Water
Moccasin (5 specimens), Gopher Snake, Water Snake (4 speci-
mens), Hog-Nose Snake, Spotted King Snake, Red Newt (20
specimens), Wood Tortoise, Mississippi Alligator (2 specimens),
Mounted Skull of Boa Constrictor, Mounted Skull of Rattlesnake.
- DORN, GEORGE, New York City:
Sand Lizard (3 specimens), Green Lizard, Swift Lizard, Green Tree
Toad, Marbled Salamander, Newt (2 specimens), 3 Bird Cages.
- EHRlich, EDWARD, New York City:
Rhesus Monkey.
- ELLIOTT, JOHN W., New York City:
Red Fox.
- ENGINEERS' CLUB, THE, New York City:
Grizzly Bear.
- FITE, FRANK E., New York City:
Raccoon.
- FORBES, SERGT. JAMES, Boisé Barracks, Idaho:
Golden Eagle (2 specimens).
- FORSYTHE, JAMES, Owego, N. Y.:
Black Bear.

- FROST, A. B., Convent, Morris Co., N. J.:
Canada Goose (6 specimens).
- FULDA, DR. CLEMENS, Brooklyn, N. Y.:
Common Marmoset (2 specimens).
- GOULD, FRANK J., Irvington-on-Hudson, N. Y.:
Alligator.
- GOULD, GEORGE J., New York City:
American Elk (6 specimens).
- HAGENBECK, CARL:
Tadorna Duck (7 specimens).
- HARRIMAN, E. H.:
Totem Pole, Carved House Front, 3 Native Boats, 3 Carved Figures
etc., from Alaska.
- HEINTZ, JOHN C., New York City:
Mississippi Alligator.
- HUNTINGTON, ARCHER MILTON, Baychester, N. Y.:
Monkey.
- IOWA, UNIVERSITY OF:
"Explorations in the Far North."
- JONES, C. J., Topeka, Kan.:
"Buffalo Jones' Forty Years of Adventure."
- JONES, WALTER, New York City:
Alligator.
- KERSTING, RUDOLPH, New York City:
Red-Tailed Hawk, 12 Lantern Slides.
- KLIPPERT, MRS. G. C., New York City:
Alligator.
- KNAPP, J. M., Pinelands Club, South Carolina:
Bay Lynx (2 specimens).
- LAGAI, DR. G., New York City:
Painted Turtle (2 specimens), Snapping Turtle (2 specimens), Spotted
Turtle (2 specimens), Blanding's Terrapin.
- LETKEMANN, HERMANN V., New York City:
White Axolotl, Reeves Turtle (2 specimens), Green-Legged Terrapin.
Blanding's Turtle, Soft Shell Turtle (4 specimens), Geographic
Terrapin (3 specimens), Mud Puppy (4 specimens), Painted
Frog, Land Frog.
- LINNEAN SOCIETY OF NEW YORK:
Transactions of the Linnean Society.
- MAGUIRE, DR. J. H., Salem, N. Y.:
Golden Eagle.
- MCCARTY, JOHN, Phoenix, Ariz.:
Prairie Rattlesnake (10 specimens), Gila Monster (3 specimens),
Chucawalla.
- MCGREGOR, DR. J. H., New York City:
Hellbender, or Menopoma (2 specimens).
- MERKEL, HERMANN W., New York Zoological Park:
Snapping Turtle (2 specimens).

- MEYROWITZ, E. B., New York City:
Twelve Thermometers.
- MUNZIE, ALBERT C., New York City:
Two Cactus.
- NATIONAL ZOOLOGICAL PARK, Washington, D. C. (*through Professor S. P. Langley*):
Boa Constrictor (10 young specimens).
- NEW YORK AQUARIUM (*through Hermann V. Letkemann*):
Snake-Necked Turtles (2 specimens), Elephant Tortoise.
- NILES, W. W., and J. BARRON, New York City:
Alaskan Grizzly Bear (2 specimens).
- OLSEN, CHARLES P., New York City:
Solanum.
- OSBORN, HENRY FAIRFIELD, JR., New York City:
Bengal Tiger.
- OSTERBURG, ANDREW, New York City:
Musk-Rat.
- PAINE, RICHARD G., Charleston, S. C.:
Boa Constrictor (4 specimens).
- PARMELEE, W. K., New Haven, Conn.:
Spotted Coluber, Muhlenberg's Turtle, Box Tortoise (2 specimens),
Spotted Turtle, Wood Tortoise, Cumberland Terrapin. Also
about two dozen specimens in alcohol.
- PEARSALL, MORRIS, New York City:
Green Snake (3 specimens), Water Snake (15 specimens), Garter
Snake (25 specimens), Ribbon Snake (10 specimens), Hog-Nose
Snake (3 specimens), Black Snake (7 specimens), Ring-Necked
Snake (12 specimens), Milk Snake (8 specimens), Red-Bellied
Snake (9 specimens), Banded Rattlesnake (2 specimens), Dia-
mond-Back Terrapin. (Also 291 small specimens to be used as
food for other serpents.)
- PHELPS, G. N., Boston, Mass.:
Peregrine Falcon (2 specimens).
- POST, MRS. EDWIN F., New York City:
Begonia, Dracæna.
- ROCKEFELLER, WILLIAM, New York City:
Red Deer (2 specimens), Fallow Deer (4 specimens).
- ROOSEVELT, HON. THEODORE, Albany, N. Y.:
Opossum.
- ROWAN, WILLIAM A., New York City:
Guinea-Pig.
- SCHIEFFELIN, WILLIAM J., New York City:
Opossum (2 specimens).
- SCHILLING, ROBERT H., New York City:
Great Horned Owl.
- SCHULZE, CHARLES W., New York City:
Box Tortoise (2 specimens).

- SERONG, CARL F., New York City:
Bandicoot Rat.
- SKELLING, JOHN J., New York City:
Cotton-Tail Rabbit.
- SKINNER, GEORGE, New York City:
Opossum (3 specimens).
- SPECK, FREDERICK G., JR., Hackensack, N. J.:
Black Snake.
- STUART, INGLIS, New York City:
Goodrich's "Illustrated Natural History" (2 vols.).
- SMITHSONIAN INSTITUTION, Washington, D. C.:
"The Poisonous Snakes of North America."
- SUTTON, MRS. I., New York City:
Green Parrot.
- TOFFLER, A., New York City:
One Steel Mat.
- TUTTLE, CHARLES A., Hunts Point, New York City:
Peacock.
- TICE, CHARLES E., Brooklyn, N. Y.:
Red-Breasted Merganser.
- WEBB, HON. WANTON S., Millville, N. J.:
Mississippi Alligator (5 specimens), Aquarium Tank.
- WHITNEY, WILLIAM C., New York City:
American Bison, or Buffalo, male specimen, named "Cleveland," from the Austin Corbin herd at Blue Mountain Park; male specimen, named "McKinley," from donor's herd at Lenox, Mass.
- WICKHAM, H., Oneonta, N. Y.:
Porcupine (2 specimens).
- WIGGERS, EMILE, New York City:
Banded Rattlesnake (7 specimens).
- WILDER, PROFESSOR BURT G., Ithaca, N. Y.:
Coyote.
- WOOD, WILLIAM C., New York City:
Canada Goose (5 specimens), East India Ducks (6 specimens).
- WOODS, P. H., New York City:
Great Horned Owl.

RECREATION SERIES.

(Gifts from the readers of Recreation Magazine.)

- ALLEN, HENRY L., Prince's Bay, S. I., N. Y.:
Little Blue Heron, Opossum.
- BOSWORTH, J. E., Gouverneur, N. Y.:
Flying Squirrel.
- BROWN'S TRACT GUIDES' ASSOCIATION, Old Forge, N. Y. (through A. M. Church):
Red Fox.

CLARK, ROLAND, New York City:

Opossum.

COOK, V. I., Belfast, N. Y.:

Great Horned Owl.

COTTRELL, ORSAMUS S., JR., Keyport, N. J.:

Screech Owl, Opossum (3 specimens).

EATON, HOWARD, Medora, N. D.:

Missouri Prairie Dog (26 specimens).

FLETCHER, L. C., and PAINE, A. B., Paulding, Mich.:

Bald Eagle (2 specimens).

GOODWIN, C. O., Pleasant Lake, Ind.:

Fox Squirrel.

LEISENTRITT, JOSEPH, Dayton, Ohio:

Gray Squirrel (2 specimens).

MATSON, F. B., Floridaville, N. Y.:

Raccoon.

PAYNE, CHARLES, Wichita, Kan.:

Skunk.

PERRIOR, A. W., Syracuse, N. Y.:

Screech Owl (2 specimens).

POND, A. EDWARD, New York City:

Wild Turkey (5 specimens).

SELOUS, PERCY, Greenville, Mich.:

Great Horned Owl, Garter Snake, Water Snake, Box Tortoise, Salamander, Blue Racer, Porcupine.

SHIELDS, G. O., New York City:

Spotted Lynx, 52 Animal Drawings, by Brooks, Rungius, Mrs. Gray, Thompson, Clarke, Aikin, and Beard.

SMITH, ROBERT, Greene, N. Y.:

Red-Tailed Hawk (2 specimens).

TRUE, B. G., Clinton, Maine:

Porcupine.

WILLIAMS, F. H., Greene, N. Y.:

Red-Tailed Hawk.

WINSLOW, MYRON J., Sloansville, N. Y.:

Screech Owl.



ERECTING THE FLYING CAGE.



NORTH END OF THE FLYING CAGE

107
51 CF

CHARTER

OF THE

New York Zoological Society.

CHAPTER 435.

AN ACT to incorporate the New York Zoological Society and to provide for the establishment of a zoological garden in the city of New York.

Accepted by the city. Became a law April 26th, 1895, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Charles A. Dana, Oswald Ottendorfer, Andrew H. Green, William H. Webb, Henry H. Cook, Samuel D. Babcock, Charles R. Miller, George G. Haven, J. Hampden Robb, Frederic W. De Voe, J. Seaver Page, Rush C. Hawkins, David James King, Wager Swayne, Charles A. Peabody, Jr., Charles E. Whitehead, Charles R. Flint, Samuel Parsons, Jr., Mornay Williams, Henry E. Gregory, Isaac W. Maclay, Isaac Rosenwald, Hugh N. Camp, Andrew D. Parker, Cornelius Van Cott, William F. Havemeyer, Frederick Shonnard, William W. Thompson, Alexander Hadden, Edward L. Owen, John H. Starin, Rush S. Huidekoper, William W. Goodrich, Albert H. Gallatin, Frederick S. Church, Edward C. Spitzka, Robert L. Niles, Madison Grant, C. Grant La Farge, William Van Valkenburg, and such other persons as may, under the provisions of its by-laws, become members of the corporation hereby created, are hereby created a body corporate and politic, by and under the name of the New York Zoological Society.

SEC. 2. Said corporation shall have power to establish and maintain in said city a zoological garden for the purpose of encouraging and advancing the study of zoology, original researches in the same and kindred subjects, and of furnishing instruction and recreation to the people, and may purchase and hold animals, plants and specimens appropriate to the objects for which said corporation is created.

SEC. 3. The managers of said corporation shall have power to make and adopt by-laws for the management and government of its affairs and business, for the admission, suspension and expulsion of its members, and for the terms and conditions of membership; to prescribe the number and mode of election of its officers; to define their duties; to provide for the safe-keeping of its property, and from time to time to alter and modify its by-laws.

SEC. 4. The affairs and business of said corporation shall be managed and controlled by a board of managers, the number of whom shall be prescribed by the by-laws. The first board of managers shall be divided by lot into three classes, equal in number, one of which classes shall hold office for one year, another for two years, and the other for three years; and all persons elected to be managers at any subsequent election shall hold office for three years, and until others are elected in their stead. There shall be a president, two vice-presidents, treasurer and secretary, to be elected by the board of managers annually, who shall hold office until others are elected in their stead. The first meeting under this act may be held at any time upon a notice of five days, signed by any five of the incorporators named in the first section of this act, fixing a time and place for such meeting, a copy whereof shall be mailed to each of said incorporators at his usual post-office address, and twelve of such incorporators shall be a quorum for the purpose of organization, adoption of by-laws and election of officers. No manager of said corporation shall receive any compensation for his services, nor be interested, directly or indirectly, in any contract concerning its property or affairs.

SEC. 5. Said corporation may raise money by the issue of its bonds, secured by a mortgage on any or all of its property not acquired from said city or state.

SEC. 6. Said corporation may take, purchase and hold real and personal estate necessary for the purpose of its incorporation, the net annual income of which shall not exceed fifty thousand dollars, and shall possess the general powers and be subject to the restrictions and liabilities prescribed in the third title of the eighteenth chapter of the first part of the revised statutes.

SEC. 7. The commissioners of the sinking fund of the said city are authorized in their discretion to allot, set apart and appropriate for the use of said corporation, any of the lands belonging to said city north of One Hundred and Fifty-fifth street, but not in the Central Park, and such appropriation may be revoked if, after the expiration of five years from the passage of the act, a zoological garden is not established thereon; said grounds thus set apart and appropriated shall be used for no purpose whatsoever except those aforesaid. As soon as any lands are set apart the Mayor of the said city of New York, and the President of the Department of Parks of said city, shall become and be ex-officio members of the board of managers of said corporation. If at any time the animals now composing the menagerie at Central Park shall be removed therefrom by the authorities having charge thereof, said authorities may make an arrangement with the incorporators named in this act or the corporation formed by them for leasing or sale of such animals to such incorporators or corporation, and said incorporators or corporation shall have a preference over any other person or corporation in respect thereto upon the same terms which said authorities could make with any such other person or corporation, or upon such other terms as to such authorities may seem proper, but nothing herein provided shall be construed as giving the

commissioners of the Department of Public Parks authority to sell, lease, transfer, or in any otherwise dispose of said animals or other property connected with or belonging to said menagerie.

SEC. 8. Admission to the said garden shall be free to the public for at least four days, one of which shall be Sunday, in each week, subject to such rules and regulations as shall be prescribed by said corporation.

SEC. 9. This act shall take effect immediately.

STATE OF NEW YORK,
OFFICE OF THE SECRETARY OF STATE, } ss:

{ L. S. }

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

Given under my hand and the seal of office of the Secretary of State, at the city of Albany, this third day of May, in the year one thousand eight hundred and ninety-five.

ANDREW DAVIDSON,
Deputy Secretary of State.

BY-LAWS
OF THE
New York Zoological Society.

ARTICLE I.

MEETINGS OF THE SOCIETY.

SECTION 1. The office and place of business of the New York Zoological Society shall be in the City of New York, unless otherwise ordered.

SEC. 2. The Society shall hold its annual meeting for the election of Managers, and other business, on the second Tuesday of January, or such day thereafter during the month of January to which said annual meeting shall adjourn.

SEC. 3. Special meetings of the Society shall be called by the Secretary, upon the request of the President or the Chairman of the Executive Committee, or at the written request of ten members.

SEC. 4. Notices of all meetings shall be mailed to each member of the Society at least three days before such meeting.

SEC. 5. At meetings of the Society twenty members shall constitute a quorum.

SEC. 6. The order of business shall be as follows :

1. Roll call.
2. Reading of minutes not previously read.
3. Report of Executive Committee.
4. Report of Secretary.
5. Report of Treasurer.
6. Report of Director.
7. Election of Managers.
8. Communications.
9. Miscellaneous business.
10. Reports and resolutions.

ARTICLE II.

BOARD OF MANAGERS.

SEC. 1. The Board of Managers shall consist of thirty-six members, together with the Mayor of New York and President of the Park Board, or Commissioner for the Bronx, who shall be members *ex-officio* of the board.

SEC. 2. Nineteen managers shall constitute a quorum, but ten managers may transact current business, and adjourn, subject to the subsequent approval of a meeting at which a quorum shall be present.

SEC. 3. The Board of Managers shall hold an annual meeting on the third Tuesday of January, or on such day thereafter to which said annual meeting shall adjourn. Regular meetings of the Board may also be called by the Secretary on the third Tuesdays of October and April, upon the request of the President or Chairman of the Executive Committee. Special meetings of the Board shall be called at any time by the Secretary, upon the request of the President or the Chairman of the Executive Committee, or at the written request of five Managers.

SEC. 4. Notices of meetings of the Board shall be mailed to each Manager at least three days before such meetings.

SEC. 5. The successors to the outgoing class of Managers shall be elected by the Society at its annual meeting, but vacancies in the Board may be filled for the unexpired term by the Board of Managers, or by the Executive Committee.

SEC. 6. A Nominating Committee shall be annually appointed by the Executive Committee, and shall consist of three members of the Society at large, who shall nominate and post ten days before the annual election the names of twelve persons to succeed the outgoing class of Managers in a conspicuous place in the office of the Society.

SEC. 7. No person shall be eligible for election to the Board of Managers, except to fill vacancies, unless his name shall have been posted as a candidate by such Committee, or by not less than ten members, in writing, in a conspicuous place in the office of the Society ten days before the annual election.

SEC. 8. Any Manager who shall fail to attend three consecutive meetings of the Board, unless excused by vote of the Board, shall cease to be a Manager.

SEC. 9. The Board of Managers shall at its annual meeting elect a President, two Vice-Presidents, a Secretary and a Treasurer, who shall hold office for one year, or until their successors are elected. The President, Vice-Presidents and Treasurer shall be members of the Board.

SEC. 10. The Director of the Zoological Park, and all other persons employed by the Society, shall be appointed by the Board or by the Executive Committee, and shall hold office during the pleasure of the Board.

SEC. 11. The Board shall, at its annual meeting, elect an Executive Committee and Auditing Committee, which shall hold office for one year, or until their successors are elected. The Board of Managers and the Executive Committee shall also have authority to appoint such other Committees or Officers as they may at any time deem desirable, and to delegate to them such powers as may be necessary.

SEC. 12. The order of business of the meetings of the Board shall be as follows :

1. Roll call.
2. Reading of minutes not previously read.
3. Report of Executive Committee.
4. Report of Secretary.
5. Report of Treasurer.

6. Report of Auditing Committee.
7. Report of Director.
8. Election of Officers.
9. Election of Committees.
10. Election of new members.
11. Communications.
12. Miscellaneous business.

SEC. 13. All reports and resolutions shall be in writing, and the ayes and nays may be called on any resolution at the request of one Manager.

SEC. 14. Whenever the funds of the Society shall permit, the Board of Managers or the Executive Committee may award medals or other prizes for meritorious work connected with the objects of the Society.

ARTICLE III.

OFFICERS.

SEC. 1. The officers of the Society shall consist of a President, two Vice-Presidents, a Treasurer, a Secretary and a Director of the Zoological Park. These officers, with the exception of the Director, shall be elected at the annual meeting of the Board of Managers, but any vacancy may be filled for an unexpired term by the Board of Managers, or by the Executive Committee, until the next annual election.

SEC. 2. The President shall preside at all meetings of the Board and of the Society, and shall be *ex-officio* a member of the Executive and Auditing Committees.

SEC. 3. The Vice-Presidents shall, in the absence of the President, perform his duties and possess his powers, acting in the order of their election.

SEC. 4. The Treasurer shall receive, collect and hold, subject to the order of the Board of Managers, or the Executive Committee, all dues, subscriptions, fees and securities. He shall pay all bills as ordered by the Board of Managers or the Executive Committee, and shall report to the Society at its annual meeting, and to the Board of Managers at all regular meetings and to the Executive Committee at each meeting. He shall keep all moneys and securities in some bank or trust company to be approved by the Board of Managers or Executive Committee. The books of the Society shall at all times be open to the inspection of the Managers.

SEC. 5. The Secretary shall be a salaried officer of the Society. He shall be present, unless otherwise relieved by the Board or Executive Committee, at all meetings of the Society, of the Board and of the Standing Committees. He shall keep a careful record of all proceedings, shall have the custody of the seal, archives and books, other than books of account, and shall conduct the correspondence of the Society. He shall issue all notices and tickets and shall perform such other duties as the Board may direct. He shall be a member *ex-officio* of the Executive and Auditing Committees and of the Scientific Council.

SEC. 6. The Director of the Zoological Park shall be elected annually by the Executive Committee at a salary to be determined by said Commit-

tee, and paid monthly from funds of the Society.* He shall be the responsible administrative officer of the Park, and shall recommend to the Executive Committee candidates for the various positions in the Park. He shall also perform all such other duties in connection with the business, scientific and literary administration of the Society as may be assigned to him by the Executive Committee.

ARTICLE IV.

COMMITTEES.

SEC. 1. There shall be two standing committees, the Executive Committee and the Auditing Committee, which shall hold office for one year or until their successors are elected.

SEC. 2. The Executive Committee shall consist of seven Managers, together with the President and Secretary of the Society *ex-officio*. Four members shall constitute a quorum, and all meetings shall be called by the Chairman. The Executive Committee shall fill all vacancies in its own number and shall have the full powers of the Board of Managers, except so far as such delegation of power may be contrary to law.

SEC. 3. The Executive Committee shall have the control and regulation of the collections, library and all other property of the Society, and shall have power to purchase, sell and exchange specimens and books, to employ and control all officials and employees of the Society and Park, and generally to carry out in detail the directions of the Board of Managers and the terms of any contract between the City, or Park Board, and the Society.

SEC. 4. All the rules and regulations for the examination of applicants for the various positions in the Park shall be made or approved by the Executive Committee.

SEC. 5. The Executive Committee may regulate the auditing and payment for all current accounts.

SEC. 6. The Executive Committee shall annually appoint a Nominating Committee, whose duties and powers are set forth in Sections 6 and 7, Article II. of these By-Laws.

SEC. 7. It shall also appoint a Scientific Council whose powers and duties are set forth in Section 2 of Article V. of the By-Laws.

SEC. 8. The Committee shall make a written report at each regular meeting of the Board of Managers.

SEC. 9. The Auditing Committee shall consist of three regular members of the Society, in addition to the President and Secretary, members *ex-officio*, and vacancies shall be filled by the Executive Committee. It shall be the duty of the Auditing Committee to audit, annually, the accounts of the Treasurer and of the Director, and any other accounts of the Society, and shall report to the Board of Managers at its annual meeting.

*Until such time as he enters fully upon his public administrative duties.

ARTICLE V.

SCIENTIFIC COUNCIL.

SEC. 1. The Executive Committee shall annually appoint a Scientific Council of not more than ten members, and shall fill all vacancies. Members of the Council shall hold office until their successors are appointed.

SEC. 2. The duties of the Council shall be to act as an advisory board in all matters pertaining to the scientific administration of the Society, and especially as to the scientific features of the Park, the promotion of zoology by publications and otherwise, and the preservation of the native fauna of America.

SEC. 3. Four members, including the Chairman, shall constitute a quorum. The Chairman shall be elected annually by the Council. The Secretary of the Society shall be a member and Secretary *ex-officio* of the Council.

ARTICLE VI.

MEMBERS.

SEC. 1. The present members and such others as shall become associated with them, under the conditions prescribed by the By-Laws, shall be members of this Society as long as they shall comply with the By-Laws.

SEC. 2. Members failing to comply with these By-Laws, or for other good and sufficient cause, may be expelled from the Society by the Executive committee.

SEC. 3. Candidates for membership shall be proposed and seconded by members of the Society. The name, occupation and place of residence of every member so proposed shall be submitted for election to the Board of Managers or the Executive Committee, and such person, when elected, shall become a member upon payment of the annual dues, or of the fees as prescribed below.

SEC. 4. The annual dues shall be ten dollars, payable in advance, on the first day of May of each year, but the Executive Committee may remit the dues for the current year in the case of members elected between January 1st and May 1st of each year. The classes of membership shall be as follows:

SEC. 5. The payment of \$200 at one time shall constitute any member a Life Member.

SEC. 6. The payment of \$1,000 at one time, or in the case of a Life Member, of \$800, shall constitute any member a Patron.

SEC. 7. The payment of \$2,500 at one time, or in the case of a Patron of \$1,500, or of a Life Member of \$2,300, shall constitute any member an Associate Founder.

SEC. 8. Any member who shall donate to the Society \$5,000, or property of equal value, or any Associate Founder who shall donate \$2,500, or any Patron who shall donate \$4,000, may be elected by the Board of Managers or Executive Committee a Founder.

SEC. 9. Any member who shall donate to the Society \$25,000, or any Founder who shall donate \$20,000, may be elected by the Board of Managers or Executive Committee a Benefactor.

SEC. 10. Persons who have rendered marked service in the science of zoology or natural history may be elected Honorary Members, but not more than three such Honorary Members shall be elected in any one calendar year.

SEC. 11. Residents who have rendered scientific services to the Society, or marked services in zoology or natural history, may be elected as Permanent Fellows.

SEC. 12. Non-residents who communicate valuable information to the Society, or who have rendered marked service in the science of zoology or natural history may be elected Corresponding Members.

SEC. 13. Benefactors, Founders, Associate Founders, Patrons, Life Members, Honorary Members, Permanent Fellows and Corresponding Members shall be exempt from annual dues.

ARTICLE VII.

PRIVILEGES OF MEMBERS.

SEC. 1. A member's ticket admits the member and his immediate family to the Park on reserve days, and to all lectures and special exhibitions, and may be used by the member's immediate family, and shall be good for the current year.

SEC. 2. Admission tickets, each admitting two persons on reserve days, are issued to members for distribution, and are good for the current year.

SEC. 3. Each member of the Society is entitled annually to a member's ticket and to ten admission tickets.

SEC. 4. Each member shall also receive one copy of the catalogue or handbook, the report and official publications of the Society, and shall have all the privileges of the Library and Members' Building.

SEC. 5. No member shall be entitled to the privileges enumerated in this Article unless his annual dues shall have been paid.

SEC. 6. The Life Members shall have all the privileges of Members and ten additional admission tickets.

SEC. 7. Benefactors, Founders, Associate Founders and Patrons shall have all the privileges of Life Members, and shall in addition receive copies of all scientific works published by the Society.

SEC. 8. Any member who shall fail to pay his annual dues within three months after the same shall have become due, and after notice of thirty days, by mail, shall cease to be a member of the Society; subject, however, to reinstatement by the Board of Managers or Executive Committee for good cause shown.

SEC. 9. Any person elected to membership who shall fail to qualify within three months after notice of his election shall be considered to have declined his election; but such term may be extended by the Board of Managers or Executive Committee.



ARTICLE VIII.

FINANCES.

SEC. 1. The fiscal year of the corporation shall be the calendar year commencing January 1st and ending December 31st.

SEC. 2. Neither the Society nor any of its Managers or Officers shall contract any debt which, with existing debts, shall exceed in amount the funds then in the Treasury.

ARTICLE IX.

AMENDMENTS.

SEC. 1. Amendments to these By-Laws may be proposed, in writing, at any meeting of the Board of Managers, and adopted by unanimous consent of the Managers present, or if such proposed amendment shall fail to receive unanimous consent, the Secretary shall, with the notices of the next meeting, send a copy of it to each Manager and state that it will be brought up for action at such meeting, when it may be passed by a majority vote.

GRANT OF SOUTH BRONX PARK
TO THE
New York Zoological Society.

At a special meeting of the Commissioners of the Sinking Fund, City of New York, held on March 24, 1897, a resolution was passed allotting South Bronx Park for the use of the New York Zoological Society upon conditions entirely satisfactory to the Society.

The full text of the resolution is as follows :

WHEREAS, by chapter 435 of the Laws of 1895, entitled "An act to incorporate the New York Zoological Society and to provide for the establishment of a Zoological Garden in the City of New York," it is provided that the Commissioners of the Sinking fund of the City of New York are authorized in their discretion to allot, set apart and appropriate, for the use of said corporation, any of the lands belonging to said city north of 155th Street, but not in Central Park,

RESOLVED, that the said Commissioners of the Sinking Fund do hereby allot, set apart and appropriate for the use of said corporation, a tract of land in the southern portion of Bronx Park, embracing an area of about 261 acres, and consisting of so much of said park as lies south of Pelham Avenue, upon the following terms and conditions, to wit :

First. That said grounds thus set apart and appropriated, shall be used for no other purpose whatsoever except for the purposes of said Zoological Garden as the same are specified in the act aforesaid, and that said appropriation of said lands hereby made shall be revoked if, after the expiration of three years from the date of the commencement of the work by the Park Department for the necessary improvement of the grounds as referred to and described in the sixth paragraph of this Resolution, a Zoological Garden is not established upon said tract of land.

Second. That the original equipment of buildings and animals for said Zoological Garden shall be paid for from funds contributed by the New York Zoological Society, and that said Society shall, before it enters into occupation of the allotted land and within one year from the date of this Resolution, raise one hundred thousand dollars by subscription, and within three years from the date of the commencement of the work by the Park Department for the necessary improvement of the grounds as referred to and described in the sixth paragraph of this Resolution, the further sum of at least one hundred and fifty thousand dollars. If the said Society shall fail or neglect to raise said funds within the periods respectively fixed therefor,

it shall, on demand of the Commissioners of the Sinking Fund, surrender to the City of New York the land allotted to it as a site for said Garden, and all improvements made thereon. The said Society shall not mortgage its buildings or animals, or any of its property within said Garden, which is directly or indirectly maintained by the City of New York.

Third. The said Zoological Society shall have the power to establish an endowment fund from the donations and bequests, which fund shall be used solely, unless otherwise specified by the donors thereof, for the general uses and purposes of said Society. The funds of said Society, other than the sums contributed to said endowment fund, shall be expended upon buildings and other enclosures for animals, for the collections of animals, and for the general purposes of the Society. Among the funds thus to be expended shall be the subscriptions of members, life members and patrons, and all cash donations to said Society, other than those made for the purposes of the endowment fund, and all moneys derived from the sale of animals; and the net proceeds of the privileges that may be developed in said Garden, such as refreshments, boating, riding animals, the sale of photographs, etc., shall be used for, and expended in the increase of the collections; and payments from the funds of such Society, including the endowment fund, shall be made directly from the treasury of the Society.

Fourth. The library, pictures, maps, office furniture, and other movable property purchased and owned by the Society shall remain the property of the Society, and excepting living animals, may be removable at will, and every piece of such property shall bear a distinguishing mark. But no buildings, aviaries or cages may be sold or removed by said Society without the written consent of the Board of Parks. All property paid for from the maintenance fund, hereinafter referred to, shall belong to the City.

Fifth. So long as the said Society is entrusted with the control and management of the said Zoological Garden, and the city provides for the proper maintenance and care of the animals and collections therein, the said Society shall not remove any of its animals or collections for exhibition elsewhere without the consent of the Board of Parks, but if the City shall ever cease to provide for the proper maintenance and care of the said animals and collections, the said Zoological Society shall have the right, upon giving three months' notice in writing to the Board of Parks, to remove the said animals and collections owned by it. The said Society shall have the right to improve its collections by the exchange of animals, and also by the sale of animals not needed for exhibition; but all moneys derived from such sale or exchange of animals shall be used only for the purpose of increasing said collections.

Sixth. The City of New York shall annually provide the necessary funds for the maintenance and care of the Zoological Garden, its buildings, inclosures and other improvements made from time to time therein, and the animals and collections of said Society; but the appropriation for the for the first year is not to exceed Sixty thousand dollars (\$60,000). It shall be the duty of the City to provide from such sums or appropriations, as may be applicable thereto, the cost of the necessary improvement of the ground

prior to the erection of buildings and inclosures, including such roads, walks, fences, grading, water supply, drainage and heating as may be or become necessary for the proper development of said Zoological Garden, all of which work of preparation and construction shall be performed in conformity with the plans therefor to be agreed upon between the Park Department and the Zoological Society. The said City shall also furnish the necessary supply of water, and adequate police patrol and protection, and the salaries of all persons employed directly in the service and development of the Zoological Garden shall be paid from the maintenance fund, and from such other funds as may be available for and applicable to the purpose. Payments from the maintenance fund shall be made upon vouchers filed with the Comptroller and drawn in such form as he may direct; and said Society shall annually render to the Mayor of the City of New York, a report showing all expenditures during the year then past, made on account of the said Zoological Garden, all revenues and resources thereof, a statement of the number of the members of said Society, of the donations received and of the number of animals in the Garden, the chief items of improvement made during the year, and all other information that the said Mayor may require.

Seventh. The Park Department shall at all times have access to the grounds, buildings and other inclosures of the said Zoological Society for general police visitation and supervision, and for all other lawful purposes. Prior to the commencement of any work on said Garden the general plan therefor shall be submitted to and approved by the Park Board, and all subsequent plans for buildings, roadways and paths shall also be so submitted and approved. No living tree shall be cut down or removed, except by the express authority of said Park Department, but the said Zoological Society shall have the right to remove dead trees and such bushes as it may be necessary to remove in the preparation of inclosures for animals, or in making other improvements. The said Department of Parks shall plant such and so many shade trees, aquatic plants, shrubs and flowers as may be necessary to enhance and secure the seclusion, beauty and usefulness of the park, and shall do and perform all the work of gardening necessary to carry out the general plan of improvement and the subsequent plans as may be agreed upon between the said Zoological Society and the said Department of Parks.

Eighth. The said Zoological Garden and its collections shall be free to the public without the payment of any admission fee or gratuity whatsoever for not less than seven hours a day on at least five days of the week, one of which shall be Sunday, and also on all legal holidays and half holidays, subject to such reasonable regulations as may be made by said Society, but the said Society may close the area devoted to the collections of animals on not more than two days in each week, and on such days may charge an admission fee which shall be fixed by said Society, and all moneys derived from such admission fees shall be expended by said Society in the increase of the collections or in the improvement of said Garden or its buildings; but the portion of the grounds situate east of Boston Road, and all the Bronx River below the Boston Road bridge shall be open to the public



at all times as pleasure grounds, subject to such reasonable regulations as may be adopted by said Society with the approval of the Park Department, and the occupancy of that portion of the park by herds of animals or by collections, shall be subject to the consent of the Park Department.

Ninth. The said Zoological Society shall have the right and power to appoint, direct, control and remove all persons and officers employed by them in and about the Zoological Garden, and to fix the salaries of such persons and officers and to make promotions, but all regular employees shall be chosen, and their salaries fixed and promotions made, by reason of special fitness and ability.

Tenth. Subject to the conditions hereinbefore contained, the said Zoological Society shall exercise entire control and management over all the affairs of the said Zoological Garden.

